

QUALIFICATIONS VALIDATED
ANNUALLY

CUSTOM HYBRID MICROCIRCUITS
QML-38534-17
31 December 1993
SUPERSEDING
QML-38534-16
31 August 1993

QUALIFIED MANUFACTURERS LIST

OF

FSC 5962

CUSTOM HYBRID MICROCIRCUITS

QUALIFIED UNDER MILITARY SPECIFICATION

MIL-H-38534

CUSTOM HYBRID MICROCIRCUITS

GENERAL REQUIREMENTS FOR

This list has been prepared for use by or for the Government in the acquisition of products covered by Specification MIL-H-38534. Listing of a product is not intended to and does not connote endorsement of the product by the Department of Defense. This list is subject to change without notice; revision or amendment of this list will be issued as necessary. The listing of a product does not in any way release the supplier from compliance with the individual item specification requirements.

THE ACTIVITY RESPONSIBLE FOR THIS QML IS THE UNITED STATES AIR FORCE, CODE 17. The activity designated as agent for all contacts relative to this QML is the Defense Electronics Supply Center (DESC-EQ), Dayton, OH 45444-5270.

If a manufacturer desires to have test data considered for qualification, he must perform all required qualification tests; the qualification sample must be produced under a valid authorization to test with DESC certified materials and manufacturing construction techniques; and he must comply with the requirements specified in MIL-H-38534 prior to the start of any testing.

The listing of custom hybrid microcircuit materials and manufacturing construction techniques in QML-38534 applies only to products produced on the MIL-STD-1772 certified line(s) at the plant(s) specified on the QML.

Only those products that have been manufactured, assembled, and tested within the United States and its territories, except as provided by international agreement establishing reciprocal and equivalent quality systems and procedures, can be supplied as qualified custom hybrid QML devices.

Custom hybrid microcircuits manufactured, assembled, and tested in accordance with MIL-H-38534 shall bear the "QML" certification mark for SMD controlled hybrid microcircuits and the "CH" (compliant hybrid) certification mark for non-SMD controlled hybrid microcircuits. The certification mark shall be located preceding the date code. The certification mark abbreviation "Q" or "C" may be used for small devices. Products manufactured, assembled, and tested for Class K or Class H, with all the provisions of MIL-H-38534, MIL-STD-1772, and with DESC certified materials and manufacturing construction techniques, can be represented as being compliant to the appropriate product assurance levels as listed herein. The information contained in this QML reflects the material and manufacturing construction techniques of the particular test sample(s). Any product represented as being compliant shall be comprised combinatorially of a manufacturer's listing from the materials and manufacturing construction techniques listed herein, as is necessary to meet the requirements of the user. The user shall be responsible for determining if the QML listing is adequate to demonstrate capability for the intended application. Supplemental testing and listing can be accomplished by application and approval of DESC-EQ. Testing is not limited to those materials and manufacturing construction techniques currently listed herein. However, testing must be completed and approved before the product can be shipped or used in the intended application.

To obtain MIL-H-38534 qualified custom hybrid microcircuits, the procurement document must specify that the product be manufactured to MIL-H-38534, and be comprised of materials and manufacturing construction techniques listed herein. Ordering data is contained in paragraph 6.1 of MIL-H-38534. All procurement documents shall meet the requirements of MIL-H-38534, Appendix C (see cautionary note herein).

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CUSTOM HYBRID MICROCIRCUITS

QML-38534-17

AMSC N/A

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

Caution: Hybrid microcircuit devices that are built tested, and shipped under the QML provision (using certified/qualified manufacturing materials and construction techniques) and in full compliance with MIL-H-38534 and MIL-STD-1772 can be determined by this QML.

Contractor acquiring activities, military program offices, and other government representatives can determine if hybrid microcircuits meet the requirements of MIL-H-38534 and MIL-STD-1772 by:

- a. Product listed in the product eligibility section herein, and
- b. Product marked with "QML" certification for SMD controlled hybrid-microcircuits and the "CH" (compliant hybrid) certification mark for non-SMD controlled hybrid microcircuits. the certification mark shall proceed the date code. the certification mark abbreviation "Q" or "C" may be used for small devices.

Products that do not meet the above conditions are not manufactured on a MIL-STD-1772 certified/qualified line and are not in full compliance with MIL-H-38534 and MIL-STD-1772 requirements. Hybrids microcircuits that require MIL-H-38534 and MIL-STD-1772 and are not listed herein should be carefully reviewed and verified for contract compliance by the acquisition activity. To determine whether new products are in accordance with MIL-H-38534 and MIL-STD-1772 you may call the agent for the qualifying activity (DESC-EQ).

NOTES:

1/ The QML listing can be expanded provided appropriate qualification testing is performed and passed. Therefore the manufacture may accept an order for compliant product not covered by his QML listing, but shall not ship the compliant product until the testing has been successfully completed.

2/ Package seal perimeter is listed by largest perimeter successfully tested in inches.

3/ Package lead counts are listed by maximum number of leads covered by qualification.

4/ Caution. Do not use this number for item acquisition. Item acquired to this number may not satisfy the performance requirements of the listed SMD.

5/ Inactive for new design, no longer available from manufacturer.

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Advanced Analog A Division of Intech 2270 Martin Avenue Santa Clara, California 95050-2781		52467	CEXA	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-89-065) EQ(EQC-93-403) EQ(EQC-93-602) EQ(EQC-90-652) EQ(EQC-93-553) EQ(EQC-93-658) EQ(EQC-92-103) EQ(EQC-93-204)				AD/DA Converters DC/DC Converters Sample and Hold Amplifier	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Santa Clara, CA FLOW: 8002-0044 CAPABILITY: thick film on alumina, 2 conductor levels, resistors			LOCATION: Santa Clara, CA FLOW: 8002-0074 CAPABILITY: thick film on alumina, 4 conductor levels, resistors; thick film on beryllia, 4 conductor levels, resistors		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Santa Clara, CA FLOW: 8002-0044 CAPABILITY: polymer conductive epoxy, solder; gold wire bonding			LOCATION: Santa Clara, CA FLOW: 8002-0074 CAPABILITY: polymer conductive/nonconductive epoxy, solder; gold, aluminum, and copper wire bonding		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, molytab, transformer, chip resistor, tantalum capacitors SUBSTRATE ATTACH: polymer conductive/nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	ceramic dual-in-line	metal, with axial leads	metal, with peripheral leads		
SEAL METHOD:	seam weld	seam weld	seam weld		
LEAD COUNT:	24	10	58		
SEAL PERIMETER:	3.69	6.58	10.10		
LEAD FINISH:	gold	gold	gold		
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Advanced Analog A Division of Intech 2270 Martin Avenue Santa Clara, California 95050-2781	52467	CEXA

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-8950901XX	1	RGBDAC3808H/B	D/A conv., triple, 8-bit, video RAM	Yes
5962-8968301HXX	1	AHE2805S/CH	DC/DC conv., 5V, 15W out, single ch.	Yes
5962-8968301HZX	1	AHE2805SF/CH	DC/DC conv., 5V, 15W out, single ch.	Yes
5962-8968302HXX	1	AHE2805S/CHSLV	DC/DC conv., 5V, 15W out, single ch.	No
5962-8968302HZX	1	AHE2805SFCHSLV	DC/DC conv., 5V, 15W out, single ch.	No
5962-8968303HXX	1	AHE2805S/CHMST	DC/DC conv., 5V, 15W out, single ch.	No
5962-8968303HZX	1	AHE2805SFCHMST	DC/DC conv., 5V, 15W out, single ch.	No
5962-9095401HXX	1	AT02815T/CH	DC/DC conv., 5V, +/-15V, 15W out, triple ch.	Yes
5962-9095401HZX	1	AT02815TF/CH	DC/DC conv., 5V, +/-15V, 15W out, triple ch.	No
5962-9157501HXX	1	AHE2815D/CH	DC/DC conv., +/-15V, 15W out, dual ch.	No
5962-9157501HZX	1	AHE2815DF/CH	DC/DC conv., +/-15V, 15W out, dual ch.	Yes
5962-9157502HXX	1	AHE2815D/CHSLV	DC/DC conv., +/-15V, 15W out, dual ch.	No
5962-9157502HZX	1	AHE2815DFCHSLV	DC/DC conv., +/-15V, 15W out, dual ch.	No
5962-9157503HXX	1	AHE2815DCHMSTR	DC/DC conv., +/-15V, 15W out, dual ch.	No
5962-9157503HZX	1	AHE2815DFCHMST	DC/DC conv., +/-15V, 15W out, dual ch.	No
5962-9157901HZX	1	ATW2805SCH	DC/DC conv., 5V, 30W out, single ch.	Yes
5962-9157902HZX	1	ATW2805SCH-SLV	DC/DC conv., 5V, 30W out, single ch.	Yes
5962-9157903HZX	1	ATW2805SCHMSTR	DC/DC conv., 5V, 30W out, single ch.	No
5962-9158001HXX	1	AHE2812S/CH	DC/DC conv., 12V, 20W out, single ch.	No
5962-9158001HZX	1	AHE2812SF/CH	DC/DC conv., 12V, 20W out, single ch.	No
5962-9158002HXX	1	AHE2812S/CHSLV	DC/DC conv., 12V, 20W out, single ch.	No
5962-9158002HZX	1	AHE2812SFCHSLV	DC/DC conv., 12V, 20W out, single ch.	No
5962-9158003HXX	1	AHE2812SCHMSTR	DC/DC conv., 12V, 20W out, single ch.	No
5962-9158003HZX	1	AHE2812SFCHMST	DC/DC conv., 12V, 20W out, single ch.	No
5962-9160001HXX	1	AHF2805S/CH	DC/DC conv., 5V, 12W out, single ch.	No
5962-9160201HXX	1	AT02812T/CH	DC/DC conv., 5V, +/-12V, 15W out, triple ch.	No
5962-9160201HZX	1	AT02812TF/CH	DC/DC conv., 5V, +/-12V, 15W out, triple ch.	No
5962-9161301HZX	1	ATW2815D/CH	DC/DC conv., +/-15V, 30W out, dual ch.	No
5962-9161302HZX	1	ATW2815D/CHSLV	DC/DC conv., +/-15V, 30W out, dual ch.	Yes
5962-9161303HZX	1	ATW2815DCHMSTR	DC/DC conv., +/-15V, 30W out, dual ch.	No
5962-9162501HXX	1	AHE2815S/CH	DC/DC conv., 15V, 20W out, single ch.	No
5962-9162501HZX	1	AHE2815SF/CH	DC/DC conv., 15V, 20W out, single ch.	No
5962-9162502HXX	1	AHE2815S/CHSLV	DC/DC conv., 15V, 20W out, single ch.	No
5962-9162502HZX	1	AHE2815SF/CHSLV	DC/DC conv., 15V, 20W out, single ch.	No
5962-9162503HXX	1	AHE2815SCHMST	DC/DC conv., 15V, 20W output single ch.	No
5962-9162503HZX	1	AHE2815SFCHMS	DC/DC conv., 15V, 20W output single ch.	No
5962-9204001HXX	1	AHE2812D/CH	DC/DC conv., +/-12V, 15W out, dual ch.	No
5962-9204001HZX	1	AHE2812DF/CH	DC/DC conv., +/-12V, 15W out, dual ch.	Yes
5962-9204002HXX	1	AHE2812D/CHSLV	DC/DC conv., +/-12V, 15W out, dual ch.	No
5962-9204002HZX	1	AHE2812DFCHSLV	DC/DC conv., +/-12V, 15W out, dual ch.	No
5962-9204003HXX	1	AHE2812DCHMSTR	DC/DC conv., +/-12V, 15W out, dual ch.	No
5962-9204003HZX	1	AHE2812DFCHMST	DC/DC conv., +/-12V, 15W out, dual ch.	No

MANUFACTURER	CAGE CODE	SYMBOL CODE
Advanced Analog A Division of Intech 2270 Martin Avenue Santa Clara, California 95050-2781	52467	CEXA

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-9210901HZX	1	ATW2812D/CH	DC/DC conv., +/-12V, 30W out, dual ch.	No
5962-9210902HZX	1	ATW2812D/CHSLV	DC/DC conv., +/-12V, 30W out, dual ch.	No
5962-9210903HZX	1	ATW2812DCHMSTR	DC/DC conv., +/-12V, 30W out, dual ch.	No
5962-9235101HXX	1	AHF2815D/CH	DC/DC conv., +/-15V, 12W out, dual ch.	No
Stock class 5915				
9102001HXX	1	AFC-461/CH	Filter, EMF, 4.0 A input current	Yes
9102001HZX	1	AFC-461F/CH	Filter, EMF, 4.0 A input current	Yes

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 0

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Aeroflex Laboratories Incorporated 35 South Service Road Plainfield, NY 11803		88379	CFAS	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-90-616) EQ(EQC-93-019) EQ(EQC-91-896) EQ(EQC-94-032) EQ(EQC-92-001)				Linear Analog Digital	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Plainview, NY FLOW: QAP21-241 CAPABILITY: thick film on alumina, 6 conductor levels, resistors			LOCATION: Plainview, NY FLOW: QAP21-225 CAPABILITY: Thick film on beryllia, 2 conductor levels, resistors		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Plainview, NY FLOW: QAP21-241 CAPABILITY: polymer conductive and nonconductive epoxy; eutectic, gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, tabs, chip resistors SUBSTRATE ATTACH: polymer nonconductive epoxy, solder					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with axial leads	ceramic, dual-in-line	metal, with peripheral leads		
SEAL METHOD:	seam weld	seam weld	seam weld		
LEAD COUNT:	78	24	82		
SEAL PERIMETER:	7.94	3.72	7.01		
LEAD FINISH:	gold	gold	gold		
PACKAGE TYPE:	TO can				
SEAL METHOD:	projection weld				
LEAD COUNT:	2				
SEAL PERIMETER:	2.60				
LEAD FINISH:	gold				

MANUFACTURER	CAGE CODE	SYMBOL CODE
Aeroflex Laboratories Incorporated 35 South Service Road Plainview, NY 11803	88379	CFAS

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-8604903YX	1	ARX2402	1553 single channel driver-receiver	No
5962-8604904UX	1	ARX3402	1553 single channel drvtr/rec., low power	Yes
5962-8753502XX	1	ARX2452	1553 remote terminal unit, dual red.	Yes
5962-8753502YX	1	ARX2452FP	1553 remote terminal unit, dual red.	Yes
5962-8757903YX	1	ARX2411FP	1553 dual channel driver/receiver, -15	No
5962-8757903XX	1	ARX2411	1553 dual channel driver/receiver, -15	Yes
5962-8757904XX	1	ARX3411	1553 dual ch. drvtr/rec., low power -15	Yes
5962-8757904YX	1	ARX3411FP	1553 dual ch. drvtr/rec., low power -15	Yes
5962-8944701HUX	1	ARX3436	1553 dual ch. drvtr/rec., idle high	No
5962-8944701HXX	1	ARX3416	1553 dual ch. drvtr/rec., idle high	Yes
5962-8944701HYX	1	ARX3416FP	1553 dual ch. drvtr/rec., idle high	No
5962-8944701HZX	1	ARX3436FP	1553 dual ch. drvtr/rec., idle high	No
5962-8952202XX	1	ARX-2453	1553 transceiver, dual channel, 5V	Yes
5962-8952202YX	1	ARX-2453FP	1553 transceiver, dual channel, 5V	Yes
5962-8952208XX	1	ARX-3453	1553 transceiver, dual channel, 5V	Yes
5962-8952208YX	1	ARX-3453FP	1553 transceiver, dual channel, 5V	No
5962-8959201XX	1	ARX3407	1553 driver/rec., single ch., low power	Yes
5962-8959201YX	1	ARX3407FP	1553 driver/rec., single ch., low power	No
5962-8959202XX	1	ARX3404	Unvl driver/rec., single ch., low power	Yes
5962-8959202YX	1	ARX3404FP	Unvl driver/rec., single ch., low power	Yes
5962-8959203XX	1	ARX3407-001	1553 driver/rec., single ch., low power	Yes
5962-8959203YX	1	ARX3407-001FP	1553 driver/rec., single ch., low power	Yes
5962-8959204XX	1	ARX3404-001	Unvl driver/rec., single ch., low power	Yes
5962-8959204YX	1	ARX3404-001FP	Unvl driver/rec., single ch., low power	No
5962-8959205XX	1	ARX3467	1553 driver/rec., single ch., low power	No
5962-8959205YX	1	ARX3467FP	1553 driver/rec., single ch., low power	Yes
5962-8959206XX	1	ARX3464	1552 driver/rec., single ch., low power	No
5962-8959206YX	1	ARX3464FP	1553 driver/rec., single ch., low power	No
5962-8982602XX	1	ARX3419	Driver/resceiver, dual channel	Yes
5962-8982602YX	1	ARX3419FP	Driver/resceiver, dual channel	No
5962-9063603HXX	1	ARX2410	Driver/resceiver, dual channel	No
5962-9063604HXX	1	ARX3410	Driver/resceiver, dual channel	No
5962-9082903HUX	1	ARX3420	Driver/resceiver, single channel	No
5962-9082904HUX	1	ARX3424	Driver/resceiver, single channel	No
5962-9174908HXX	1	ARX4407	Single channel, driver-receiver	No
5962-9174908HYX	1	ARX4407FP	Single channel, driver-receiver	No
5962-9174908HTX	1	ARX4407LPFP	Single channel, driver-receiver	No
5962-9174909HXX	1	ARX4404	Single channel, driver-receiver	No
5962-9174909HYX	1	ARX4404LP	Single channel, driver-receiver	No
5962-9174909HTX	1	ARX4404LPFP	Single channel, driver-receiver	No
5962-9208502XX	1	ARX4451	Single channel, driver-receiver	No

MANUFACTURER	CAGE CODE	SYMBOL CODE
Aeroflex Laboratories Incorporated 35 South Service Road Plainview, NY 11803	88379	CFAS

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>A</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-9208502YX	1	ARX4451FP	Single channel, driver-receiver	No
5962-9208503XX	1	ARX4418	Single channel, driver-receiver	No
5962-9208503YX	1	ARX4418FP	Single channel, driver-receiver	No
5962-9313401HXX	1	ARX5006	Voltage Regulator	No
5962-9313402HXX	1	ARX5007	Voltage Regulator	No
5962-9313403HXX	1	ARX5008	Voltage Regulator	No
5962-9313404HXX	1	ARX5009	Voltage Regulator	No
5962-9313405HXX	1	ARX5010	Voltage Regulator	No
5962-9313406HXX	1	ARX5011	Voltage Regulator	No
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 25				

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Analog Devices Incorporated Assembled Products Division 7910 Triad Center Drive Greensboro, NC 27409-9605		34031	CETW	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-92-025) EQ(EQC-93-047) EQ(EQC-93-450) EQ(EQC-92-119) EQ(EQC-93-115) EQ(EQC-93-633) EQ(EQC-92-476) EQ(EQC-93-116)				AD/DA Converters Track and Hold Buffer Voltage Reference Op-Amp Signal Processor	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Greensboro, NC FLOW: QAP 3060 CAPABILITY: thick film on alumina, 4 conductor level, resistors			LOCATION: Greensboro, NC FLOW: QAP 3060 CAPABILITY: thin film on alumina, 1 conductor level, resistors		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Greensboro, NC FLOW: QAP 3060 CAPABILITY: polymer conductive & nonconductive epoxy; gold and aluminum wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors SUBSTRATE ATTACH: polymer nonconductive epoxy <u>** Maximum constant acceleration level qualified 7500g, A7910 package only.</u>					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	TO can	metal, with axial leads <u>**</u>		ceramic dual-in-line & Quad flat pack	
SEAL METHOD:	projection Weld	seam weld		seam weld	
LEAD COUNT:	12	46		84	
SEAL PERIMETER:	1.91	7.94		6.42	
LEAD FINISH:	gold & solder	gold & solder		gold	
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Analog Devices Incorporated Assembled Products Division 7910 Triad Center Drive Greensboro, North Carolina 27409-9605	34031	CETW

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
8300201JX	1	DAC87	D/A Conv., 12-bit, programmable	Yes
8503001YX	1	2700SD	Reference, Precision Voltage, +10V	Yes
8503002YX	1	2700UD	Reference, Precision Voltage, +10V	Yes
8503003YX	1	2701SD	Reference, Precision Voltage, -10V	Yes
8503004YX	1	2702SD	Reference, Precision Voltage, +/-10V	Yes
8503005YX	1	2702UD	Reference, Precision Voltage, +/-10V	Yes
8503006YX	1	2701UD	Reference, Precision Voltage, -10V	Yes
5962-8850901XX	1	AD390S	D/A conv, 12-bit, bipolar, linear, quad	Yes
5962-8850902XX	1	AD390T	D/A conv, 12-bit, bipolar, linear, quad	Yes
5962-8851001XX	1	AD394S	D/A conv, 12-bit, bipolar	Yes
5962-8851002XX	1	AD394T	D/A conv, 12-bit, quad, bipolar	Yes
5962-8857901XC	1	HOS-050A	Op Amp, Video, Fast Settling, +/- 15mV	Yes
5962-8857902XC	1	HOS-060SH	Op Amp, Video, Fast Settling, +/- 1.5mV	Yes
5962-8865801XX	1	AD578X	A/D conv, 12-bit, high speed	Yes
5962-8865802XX	1	AD578T	A/D conv, 12-bit, high speed	Yes
5962-8865803XX	1	AD578ZSD	A/D conv, 12-bit, high speed	No
5962-8865804XX	1	AD578ZTD	A/D conv, 12-bit, high speed	No
5962-8994001HXX	1	AD346SD/883B	Sample and hold, high speed amplifier	No
5962-9073001YX	1	HTC-0300AM/883	High speed track and hold amplifier	No
5962-9066601HXX	1	AD9005ATM/883B	A/D Conv., 12-bit	No
5962-9171201HXX	1	AD1385TD/883B	A/D Conv., 16-bit	No

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 27

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Apex Microtechnology Corporation 5980 North Shannon Road Tucson, AZ 85741		60024	CFAB	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-91-347) EQ(EQC-93-028) EQ(EQC-92-410) EQ(EQC-93-595) EQ(EQC-90-416)				Power Operational Amplifier	
SUBSTRATE FABRICATION OPERATION(S) <u>1/</u>					
LOCATION: Tucson, AZ FLOW: FLOW 01 CAPABILITY: thick film on beryllium oxide, 1 conductor level, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Tucson, AZ FLOW: FLOW 10, FLOW 99 CAPABILITY: polymer conductive epoxy, solder; aluminum wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors SUBSTRATE ATTACH: solder					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	T0 can				
SEAL METHOD:	projection weld				
LEAD COUNT:	8				
SEAL PERIMETER:	2.67				
LEAD FINISH:	gold & solder				
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Apex Microtechnology Corporation 5980 North Shannon Road Tucson, AZ 85741	60024	CFAB

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-8762002HXX	1	PA51M/883	Power operational amplifier	Yes
5962-9063801HXX	1	PA07M/883	Power operational amplifier	Yes
5962-9065901HXX	1	PA12M/883	Operational amplifier, power	Yes
5962-9067901HXX	1	PA02M/883	Power operational amplifier	Yes
5962-9072301HXX	1	PA08M/883	Power operational amplifier	No
5962-9082801HXX	1	PA10M/883	Power operational amplifier	Yes
5962-9162101HXX	1	PA83M/883	Power operational amplifier	Yes
5962-9073601HXX	1	PA84M/883	Power operational amplifier	No
5962-9170001HXX	1	PA09M/883	Power operational amplifier	Yes
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 132				

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Beckman Industrial Corporation Electronic Technologies Division 4141 Palm Street Fullerton, CA 92635		73138	CEXB	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-89-071) EQ(EQC-92-383) EQ(EQC-91-718) EQ(EQC-92-382)				Voltage Regulator Data Converters Analog	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Fullerton, CA FLOW: 800-403-2 CAPABILITY: thick film on alumina, 3 conductor level, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Fullerton, CA FLOW: 800-403-03 CAPABILITY: polymer conductive/nonconductive epoxy, eutectic; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors, molytabs SUBSTRATE ATTACH: polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal ,with peripheral leads	ceramic, dual-in-line	ceramic co-fire, dual-in-line		
SEAL METHOD:	seam weld	seam weld	seam weld		
LEAD COUNT:	61	44	10		
SEAL PERIMETER:	5.86	6.87	1.04		
LEAD FINISH:	solder	gold	gold		
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Beckman Industrial Corporation Electronic Technologies Division 4141 Palm Street Fullerton, California 92635	73138	CEXB

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 2

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HYBRID MICROCIRCUITS
QML-38534-17

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Boeing Electronics Company 20403 Sixty-Eighth Avenue South Kent, WA 98124		81205	CEUW	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQM-87-2947) EQ(EQC-91-228) EQ(EQC-91-624) EQ(EQC-91-046) EQ(EQC-91-630) EQ(EQC-91-438) EQ(EQC-92-079) EQ(EQC-91-672)				Custom	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Kent, WA FLOW: D900-10476-1-2 CAPABILITY: thick film on alumina, 10 conductor levels, resistors; thick film on beryllia, 5 conductor levels			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Kent, WA FLOW: D900-10476-1-2 CAPABILITY: polymer conductive/nonconductive epoxy, eutectic; gold wire and ribbon bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, tabs SUBSTRATE ATTACH: polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with axial leads	metal, with peripheral leads			
SEAL METHOD:	seam weld	seam weld			
LEAD COUNT:	30	94			
SEAL PERIMETER:	5.86	9.16			
LEAD FINISH:	gold	gold			
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Boeing Electronics Company 20403 Sixty-Eighth Avenue South Kent, Washington 98124	81205	CEUM

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 5

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
C-MAC Microelectronics Limited South Denes Great Yarmouth Norfolk NR30 3PX England		81205	CEUW	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-91-835) EQ(EQC-93-139) EQ(EQC-92-084)				MIL-STD-1553 Transceiver	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Great Yarmouth, England FLOW: FCES 6301:15 CAPABILITY: Thick film on alumina, 2 conductor levels			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Great Yarmouth, England FLOW: FCES 6301:15 CAPABILITY: polymer conductive/nonconductive epoxy, gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors SUBSTRATE ATTACH: polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	Metal, with axial leads	Metal with peripheral leads	Metal, with axial leads		
SEAL METHOD:	Seam weld	Seam weld	Projection weld		
LEAD COUNT:	36	36	24		
SEAL PERIMETER:	5.3	5.3	4.37		
LEAD FINISH:	gold, solder	gold, solder	gold, solder		
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
C-MAC Microcircuits Limited South Denes Great Yarmouth Norfolk NR30 3PX England	U4388	N/A

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-8604907XX	1	FC155361	1553 Single Transceiver, 15V	No
5962-8604908XX	1	FC155362	1553 Single Transceiver, 15V	No
5962-8757906XX	1	FC1553623	1553 Dual Transceiver, 15V	Yes
5962-8757906YX	1	FC1553623FP	1553 Dual Transceiver, 15V	Yes
5962-8944703XX	1	FC1553622	1553 Dual Transceiver, 15V	No
5962-8944703YX	1	FC1553622FP	1553 Dual Transceiver, 15V	No
5962-8952206XX	1	FC1553921	1553 Dual Transceiver, 5V	Yes
5962-8952206YX	1	FC1553921FP	1553 Dual Transceiver, 5V	No
5962-8952207XX	1	FC1553923	1553 Dual Transceiver, 5V	No
5962-8952207YX	1	FC1553923FP	1553 Dual Transceiver, 5V	No
5962-8979901XX	1	FC155391	1553 Single Transceiver, 5V	No
5962-8979901YX	1	FC155391FP	1553 Single Transceiver, 5V	No
5962-8979902XX	1	FC155392	1553 Single Transceiver, 5V	No
5962-8979902YX	1	FC155392FP	1553 Single Transceiver, 5V	No
5962-8982605XX	1	FC1553721	1553 Dual Transceiver, 12V	No
5962-8982605YX	1	FC1553721FP	1553 Dual Transceiver, 12V	No
5962-9082901XX	1	FC155371	1553 Single Transceiver, 12V	No
5962-9082901YX	1	FC155371SSW	1553 Single Transceiver, 12V	No
5962-9082901TX	1	FC155271FP	1553 Single Transceiver, 12V	No
5962-9082902XX	1	FC155372	1553 Single Transceiver, 12V	No

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 20

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
CTS Microelectronics 1201 Cumberland Avenue West Lafayette, IN 47906		23223	CEUR	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-92-787) EQ(EQC-93-015)				Analog Converter	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: West Lafayette, IN FLOW: STD-THINFLM-BD1 CAPABILITY: thin film on alumina, 1 conductor level, resistors			LOCATION: West Lafayette, IN FLOW: STD-RC-HIREL CAPABILITY: Thick film on alumina, 1 conductor level, resistors.		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: West Lafayette, IN FLOW: STD-C&W-1772 CAPABILITY: eutectic, polymer nonconductive and conductive epoxy; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip resistors, chip capacitors SUBSTRATE ATTACH: polymer nonconductive and conductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	TO can	platform	metal, with peripheral leads		
SEAL METHOD:	projection weld	projection weld	seam weld		
LEAD COUNT:	12	4	30		
SEAL PERIMETER:	2.75	2.35	4.40		
LEAD FINISH:	gold & solder	gold	gold		
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
CTS Microelectronics 1201 Cumberland Avenue West Lafayette, Indiana 47906	23223	CEUR

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
7801301XX	1	CTS0002	Amplifier, current, thick/thin film	Yes
7801301GX	1	CTS0002XB	Amplifier, current, thick/thin film	Yes
8001301ZX	1	CTS0032ZB	Op Amp, thick film	No
8001401ZX	1	CTS0033ZB	Hi Speed Buffer Amp, Volt. Foll., FET in	No
8508701ZX	1	CTS0041ZB	Hi Pwr. Op Amp, Ext. Comp., 2.0A out	No
8508801YX	1	CTS0021ZB	Hi Pwr. Op Amp, Ext. Comp., 1.0A out	No
5962-8761701XX	1	CTS0006IB	Driver, High Voltage, 1.5A	No
5962-8761702XX	1	CTS0008IB	Driver, High Voltage, 3.0A	No

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 7

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Canadian Marconi Company 2442 Trenton Avenue Montreal, Quebec, Canada H3P 1Y9		90073	CDDF	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-91-720) EQ(EQC-92-427)				Voltage Regulator	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Montreal, Canada FLOW: 411-146425-000 CAPABILITY: Thick film on alumina, 1 conductor levels, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Montreal, Canada FLOW: 411-146426-000 CAPABILITY: polymer conductive and nonconductive epoxy, eutectic, gold wire bonding.			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitor. SUBSTRATE ATTACH: polymer nonconductive epoxy.					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with axial leads				
SEAL METHOD:	seam weld				
LEAD COUNT:	16				
SEAL PERIMETER:	3.61				
LEAD FINISH:	gold				
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Canadian Marconi Company 2442 Trenton Avenue Montreal, Quebec Canada H3P 1Y9	90073	CDDF

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 0				

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Cincinnati Electronics Corporation 7500 Innovation Way Mason, OH 45040-9699		80045	(TBD)	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-93-113) EQC-93-197				Custom Linear Analog Amplifier	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Mason, OH FLOW: 637140 CAPABILITY: Thick film on alumina, 1 conductor level.			Location: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Mason, Ohio FLOW: 637143 CAPABILITY: polymer conductive epoxy, gold wire bonding.			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitor, chip resistors. SUBSTRATE ATTACH: polymer nonconductive epoxy.					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with axial leads				
SEAL METHOD:	seam weld				
LEAD COUNT:	18				
SEAL PERIMETER:	3.48				
LEAD FINISH:	gold				
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Cincinnati Electronics Corporation 7500 Innovation Way Mason, OH 45040-9699	80045	(TBD)

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 0				

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Comlinear Corporation 4800 Wheaton Drive Fort Collins, CO 80525		62839	CEYA	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-89-224) EQ(EQC-91-704) EQ(EQC-90-392) EQ(EQC-91-746) EQ(EQC-90-393)				Data Converters Op-Amp	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Fort Collins, CO FLOW: TFS-01-001 CAPABILITY: thin film on alumina, 1 conductor level, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Fort Collins, CO FLOW: PDS-01-001 CAPABILITY: polymer conductive/nonconductive epoxy; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die,chip capacitors, chip resistors SUBSTRATE ATTACH: polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	TO can	Ceramic dual-in-line			
SEAL METHOD:	projection weld	Seam weld			
LEAD COUNT:	12	40			
SEAL PERIMETER:	1.81	6.22			
LEAD FINISH:	Gold & solder	Gold & solder			
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Comlinear Corporation 4800 Wheaton Drive Fort Collins, Colorado 80525	62839	CEYA

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-8959401XX	1	CLC231A8C	Op amp, wideband, high speed	Yes
5962-8985801XX	1	CLC206A8C	Op amp, wideband	Yes
5962-8991001XX	1	CLC200A8C	Op amp, wideband, high speed	Yes
5962-8991101XX	1	CLC220A8C	Op amp, wideband	Yes
5962-9083301HXX	1	CLC201A8C	Op amp, wideband	Yes
5962-9083501HXX	1	CLC205A8C	Op amp, wideband	Yes
5962-9083601HXX	1	CLC221A8C	Op amp, wideband	No
5962-9097701HXX	1	CLC207A8C	Op amp, wideband, low distortion	No
5962-9099501HXX	1	CLC925B8C	12-bit, A/D converter	Yes
5962-9166501HXX	1	CLC232A8C	Op amp, wideband, low distortion	No

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 2

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
DDC Ireland LTD. Cork Business and Technology Park Model Farm Road Cork, Ireland		S7631	(TBD)	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQM-94-0109)				1553 Bus Data Converters	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Bohemia, NY FLOW: 41637 CAPABILITY: thick film on alumina, 5 conductor levels, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Cork, Ireland FLOW: 60005 CAPABILITY: polymer conductive/nonconductive epoxy; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors SUBSTRATE ATTACH: polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	ceramic, with axial leads				
SEAL METHOD:	seam weld				
LEAD COUNT:	78				
SEAL PERIMETER:	7.34				
LEAD FINISH:	gold				
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
DDC Ireland LTD. Cork Business and Technology Park Model Farm Road Cork, Ireland	S7631	(TBD)

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-8869201XA	1	BUS61553II-140	1553 Advcnd. Intgrtd. MUX, 8K x 16 RAM	No
5962-8869201XA	1	BUS61553II-150	1553 Advcnd. Intgrtd. MUX, 8K x 16 RAM	No
5962-8869201XC	1	BUS61553II-130	1553 Advcnd. Intgrtd. MUX, 8K x 16 RAM	No
5962-8869201XC	1	BUS61553II-883	1553 Advcnd. Intgrtd. MUX, 8K x 16 RAM	No
5962-8869202XA	1	BUS61554II-150	1553 Advcnd. Intgrtd. MUX, 8K x 16 RAM	No
5962-8869202XA	1	BUS61554II-140	1553 Advcnd. Intgrtd. MUX, 8K x 16 RAM	No
5962-8869202XC	1	BUS61554II-130	1553 Advcnd. Intgrtd. MUX, 8K x 16 RAM	No
5962-8869202XC	1	BUS61554II-883	1553 Advcnd. Intgrtd. MUX, 8K x 16 RAM	No
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 0				

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Datel Incorporated 11 Cabot Boulevard Mansfield, MA 02048-1194		50721	CFAT	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-90-626) EQ(EQC-92-446) EQ(EQC-90-677) EQ(EQC-91-029)				Digital	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Mansfield, MA FLOW: D-4552 CAPABILITY: thick film on alumina, 2 conductor levels			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Mansfield, MA FLOW: D-4552 CAPABILITY: polymer conductive/nonconductive epoxy; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors SUBSTRATE ATTACH: polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	ceramic dual-in-line				
SEAL METHOD:	seam weld				
LEAD COUNT:	62				
SEAL PERIMETER:	7.24				
LEAD FINISH:	gold				
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Datel Incorporated 11 Cabot Boulevard Mansfield, MA 02048-1194	50721	CFAT

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-8850801XX	1	ADC-HX/883B	A/D Conv., 12-bit, 20 μ s conversion time	Yes
5962-8850802XX	1	ADC-Hz/883B	A/D Conv., 12-bit, 8 μ s conversion time	Yes
5962-8952801XX	1	DAC HKB/883B	D/A Conv., 12-bit, binary input code	Yes
5962-8952802XX	1	DAC HKB-2/883B	D/A Conv., 12-bit, two's complement	Yes
5962-8953101XX	1	DAC HPB/883B	D/A Conv., 16-bit, 0 to +10, +/-5 volts output	Yes
5962-8953102XX	1	DAC HPB-1/883B	D/A Conv., 16-bit, +/-10 volts output	Yes

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 17

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HYBRID MICROCIRCUITS

QML-38534-17

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Elantec Incorporated 1996 Tarob Court Milpitas, CA 95035		64762	CEWO	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-88-1646) EQ(EQC-90-0804)				Analog Converter Power Converter	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Milpitas, CA FLOW: FCA-0002 CAPABILITY: thick film on alumina, 1 conductor level, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Milpitas, CA FLOW: FCA-0004, FCA-0008, FCA-0015 CAPABILITY: eutectic; aluminum & gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die SUBSTRATE ATTACH: solder, polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	TO can				
SEAL METHOD:	projection weld				
LEAD COUNT:	12				
SEAL PERIMETER:	2.31				
LEAD FINISH:	gold & solder				
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Elantec Incorporated 1996 Tarob Court Milpitas, California 95035	64762	CEWO

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
7801301XX	1	ELH0002H/883B	Amplifier, current, thick film	Yes
8001301ZX	1	ELH0032G/883B	Op amp, thick film	Yes
8001401ZX	1	ELH0033G/883B	Hi Speed Buffer Amp, Volt. Foll., FET in	Yes
8508701ZX	1	ELH0041G/883B	Hi Power Op Amp, Ext. Comp., 0.2A Out.	Yes
8508801YX	1	ELH0021K/883B	Hi pwr. Op amp, ext. comp., 1.0A Out.	Yes
8508901YX	1	ELH0101AK/883B	Hi pwr. Op amp, wideband, thick film	Yes
8508902YX	1	ELH0101K/883B	Hi pwr. Op amp, wideband, thick film	Yes
5962-8965901XX	1	EL2004G/883B	Buffer amp, FET in.	Yes

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 1

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Film Microelectronics Incorporated 530 Turnpike Street North Andover, MA 01845		27851	CEYB	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-89-233)				Bi-polar Power (Buffer)	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Burlington, MA FLOW: 52-0069 CAPABILITY: thin film on beryllia, 1 conductor level			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Peabody, MA FLOW: 52-0015 CAPABILITY: polymer conductive epoxy; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors SUBSTRATE ATTACH: polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with peripheral leads				
SEAL METHOD:	seam weld				
LEAD COUNT:	19				
SEAL PERIMETER:	4.78				
LEAD FINISH:	gold				
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Film Microelectronics Incorporated 530 Turnpike Street North Andover, Massachusetts 01845	27851	CEYB

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 0

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
General Microcircuits Corporation 780 Boston Road Billerica, MA 08121		67294	CEYC	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-89-235) EQ(EQC-93-587)				Custom	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Billerica, MA FLOW: 10000 CAPABILITY: thin film on alumina, 1 conductor level, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Billerica, MA FLOW: 10000 CAPABILITY: polymer conductive epoxy and solder; gold and aluminum wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors SUBSTRATE ATTACH: polymer conductive/nonconductive epoxy, solder					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with peripheral leads				
SEAL METHOD:	seam weld				
LEAD COUNT:	22				
SEAL PERIMETER:	2.45				
LEAD FINISH:	gold				
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
General Microcircuits Corporation 780 Boston Road Billerica, Massachusetts 08121	67294	CEYC

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 0				

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Hewlett-Packard Company Optical Communications Division 370 West Trimble Road San Jose, CA 95131		50434	CEUS	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQM-87-2594) EQ(EQC-93-271) EQ(EQM-88-1265) EQ(EQC-93-591) EQ(EQC-90-0754)				Optocoupler	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: San Jose, CA FLOW: 5956-9439-20, 5956-8000-20, 5956-9523-30, 5956-9526-30 CAPABILITY: light emitting diode fabrication, integrated circuit fabrication			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: San Jose, CA FLOW: 1CP1-0016-3, 1SS1-6008-3 CAPABILITY: eutectic and silver glass; gold and aluminum wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die SUBSTRATE ATTACH: eutectic, solder, silver glass					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	ceramic dual-in-line	leadless chip carrier			
SEAL METHOD:	solder	solder			
LEAD COUNT:	16	20			
SEAL PERIMETER:	1.28	0.92			
LEAD FINISH:	gold, solder	solder			
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Hewlett-Packard Company Optical Communications Division 370 West Trimble Road San Jose, California 95131	50434	CEUS

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
8102801EX	3	6N134/883B	Optocoupler, dual channel	Yes
8102801TX	3	6N134/883B	Optocoupler, dual channel	No
8102801UX	3	6N134/883B	Optocoupler, dual channel	No
8102802PX	3	HCPL-5631	Optocoupler, dual channel	Yes
8102802YX	3	HCPL-5631	Optocoupler, dual channel	No
8102802ZX	3	HCPL-5631	Optocoupler, dual channel	Yes
81028032X	3	HCPL-6631	Optocoupler, dual channel	Yes
8302401EX	3	6N140A/883B	Optocoupler, quad	Yes
5962-8767901EX	1	4N55/883B	Optocoupler, dual channel	Yes
5962-8767901TX	1	4N55/883B	Optocoupler, dual channel	No
5962-8767901UX	1	4N55/883B	Optocoupler, dual channel	No
5962-8767902PX	3	HCPL-5531	Optocoupler, dual channel	Yes
5962-8767902XX	3	HCPL-5531	Optocoupler, dual channel	No
5962-8767902YX	3	HCPL-5531	Optocoupler, dual channel	No
5962-87679032A	1	HCPL-6531	Optocoupler, dual channel	Yes
5962-8876801PX	1	HCPL-5201	Optocoupler, single channel	Yes
5962-8876901PX	3	HCPL-5231	Optocoupler, dual channel	Yes
5962-8876901XX	3	HCPL-5231	Optocoupler, dual channel	No
5962-8876901YX	3	HCPL-5231	Optocoupler, dual channel	No
5962-88769022X	1	HCPL-6231	Optocoupler, dual channel	Yes
5962-8947701XX	2	HCPL-5761	Optocoupler, AC/DC logic interface	No
5962-8947701PX	2	HCPL-5761	Optocoupler, AC/DC logic interface	Yes
5962-8947701YX	2	HCPL-5761	Optocoupler, AC/DC logic interface	No
5962-8957001PX	2	HCPL-5401	Optocoupler, high speed, single channel	Yes
5962-8957001XX	2	HCPL-5401	Optocoupler, high speed, single channel	No
5962-8957001YX	2	HCPL-5401	Optocoupler, high speed, single channel	No
5962-8957101PX	3	HCPL-5431	Optocoupler, high speed, dual channel	Yes
5962-8957101XX	3	HCPL-5431	Optocoupler, high speed, dual channel	No
5962-8957101YX	3	HCPL-5431	Optocoupler, high speed, dual channel	No
5962-89571022X	3	HCPL-6431	Optocoupler, dual channel, high speed	Yes
5962-8957201EX	1	HCPL-1931	Optocoupler-line receiver, dual channel	Yes
5962-8978501PX	3	HCPL-5731	Optocoupler, dual channel	Yes
5962-8978501YX	3	HCPL-5731	Optocoupler, dual channel	No
5962-8978501ZX	3	HCPL-5731	Optocoupler, dual channel	No
5962-89785022X	2	HCPL-6731	Optocoupler, dual channel, LCC package	Yes
5962-8981001PX	2	HCPL-5701	Optocoupler, single channel, high gain	Yes
5962-9085401HPX	1	HCPL-5501	Optocoupler, single ch., transistr out	Yes
5962-9085501HPX	1	HCPL-5601	Optocoupler, dual channel	Yes
5962-9314001HPX	2	HSSR-7111	Power switch with optically isolated cont	No
5962-9314001HXX	2	HSSR-7111#300	Power switch with optically isolated cont	No

MANUFACTURER		CAGE CODE	SYMBOL CODE	PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements. The listing does not in anyway represent or imply interchangeability, equivalency.	
Hewlett-Packard Company Optical Communications Division 370 West Trimble Road San Jose, California 95131		50434	CEUS		
SPECIFIC PRODUCT TYPES					
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED	
5962-9314001HYX	2	HSSR-7111#100	Power switch with optically isolated cont	No	
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 31					

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Honeywell Incorporated Sperry Central Manufacturing 21111 North Nineteenth Avenue Phoenix, AZ 85036		58960	CEUT	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQM-87-1933) EQ(EQC-90-0768)				Analog Digital Drive Controller	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Phoenix, AZ FLOW: 51549 CAPABILITY: thick film on alumina, 2 conductor levels, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Phoenix, AZ FLOW: 51550 CAPABILITY: polymer conductive/nonconductive epoxy; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die SUBSTRATE ATTACH: eutectic					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with peripheral leads				
SEAL METHOD:	seam weld				
LEAD COUNT:	36				
SEAL PERIMETER:	3.5				
LEAD FINISH:	gold				
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Honeywell Incorporated Sperry Central Manufacturing 21111 North Nineteenth Avenue Phoenix, Arizona 85036	58960	CEUT

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 1				

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Hughes Aircraft Company Microelectronics Circuit Division Space Business Unit 500 Superior Avenue Newport Beach, CA 92658-8903		55267	CEYN	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-89-341)				Analog Digital	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Space Business Unit, Newport Beach, CA FLOW: 1051091 CAPABILITY: thick film on alumina, 1 conductor level, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Space Business Unit, Newport Beach, CA FLOW: 1120379 CAPABILITY: polymer conductive epoxy, eutectic; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, molytab SUBSTRATE ATTACH: polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with axial leads				
SEAL METHOD:	seam weld				
LEAD COUNT:	22				
SEAL PERIMETER:	2.03				
LEAD FINISH:	gold				
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Hughes Aircraft Company Microelectronics Circuit Division Multichip Microcircuit Business Unit (E1000) 500 Superior Avenue Newport Beach, CA 92658-8903		55267	CEYN	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-90-326)				Analog Digital	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Multichip Microcircuit Business Unit, Newport, CA FLOW: 1051089 CAPABILITY: thin film on alumina, 1 conductor level, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Multichip Microcircuit Business Unit, Newport, CA FLOW: 1050994 CAPABILITY: polymer conductive epoxy, eutectic; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistor SUBSTRATE ATTACH: polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	leadless chip carrier				
SEAL METHOD:	seam weld				
LEAD COUNT:	68				
SEAL PERIMETER:	4.25				
LEAD FINISH:	solder				
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Hughes Aircraft Company Microelectronics Circuit Division Space/Multichip Micro. Business Unit 500 Superior Avenue Building 700 P. O. Box H Newport Beach, California 92658	55267	CEYN

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 0				

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HYBRID MICROCIRCUITS
QML-38534-17

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Hycomp Incorporated 165 Cedar Hill Street Marlborough, MA 01752		34707	CEYP	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-89-421)				Analog Voltage Reference	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Marlborough, MA FLOW: EMA-75 CAPABILITY: thin film on alumina, 1 conductor level, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Marlborough, MA FLOW: EMA-75 CAPABILITY: polymer conductive/nonconductive epoxy; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors SUBSTRATE ATTACH: polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	ceramic dual-in-line				
SEAL METHOD:	seam weld				
LEAD COUNT:	10				
SEAL PERIMETER:	2.9				
LEAD FINISH:	gold				
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Hycomp Incorporated 165 Cedar Hill Street Marlborough, Massachusetts 01752	34707	CEYP

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
8503001YX	1	HC2700SD/883	Reference, Precision Voltage, +10V	No
8503002YX	1	HC2700UD/883	Reference, Precision Voltage, +10V	No
8503003YX	1	HC2702SD/883	Reference, Precision Voltage, -10V	No
8503004YX	1	HC2702SD/883	Reference, Precision Voltage, +/-10V	No
8503005YX	1	HC2701UD/883	Reference, Precision Voltage, +/-10V	No
8503006YX	1	HC2701UD/883	Reference, Precision Voltage, -10V	No

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 22

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Hytek Microsystems Incorporated 400 Hot Springs Road Carson City, NE 89706		0ANM4	CEYO	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-91-859) EQ(EQM-94-0023)				Active Delay line	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Carson City, NV FLOW: RN1005-002 CAPABILITY: thick film on alumina, 2 conductor levels, resistors; thick film on beo, 1 conductor level			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Carson City, NV FLOW: RN1005-002 CAPABILITY: polymer conductive/nonconductive epoxy, solder; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, inductors SUBSTRATE ATTACH: polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	platform	metal, with axial leads			
SEAL METHOD:	projection weld	seam weld			
LEAD COUNT:	16	30			
SEAL PERIMETER:	2.94	2.94			
LEAD FINISH:	solder or gold	gold			
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Hytek Microsystems Incorporated 400 Hot Springs Road Carson City, Nevada 89706	0ANM4	CEYO

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 75

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
ILC Data Device Corporation 105 Wilbur Place Bohemia, NY 11716		19645	CEPB	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-90-220) EQ(EQC-91-308) EQ(EQC-93-055) EQ(EQC-91-104) EQ(EQC-91-386) EQ(EQC-93-199) EQ(EQC-91-306) EQ(EQC-91-667) EQ(EQC-93-599)				1553 Bus Data Converters	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Bohemia, NY FLOW: 41637 CAPABILITY: thick film on alumina, 5 conductor levels, resistors			LOCATION: Bohemia, NY FLOW: 41638 CAPABILITY: thin film on alumina, 1 conductor level, resistors		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Bohemia, NY FLOW: 36070, 36071 CAPABILITY: polymer conductive/nonconductive epoxy, solder; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors SUBSTRATE ATTACH: polymer nonconductive epoxy, solder					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with axial leads	platform	metal, with peripheral leads		
SEAL METHOD:	seam weld	projection weld	seam weld		
LEAD COUNT:	94	32	82		
SEAL PERIMETER:	10.26	5.38	7.58		
LEAD FINISH:	gold	gold	gold		
PACKAGE TYPE:	ceramic, axial & peripheral leads				
SEAL METHOD:	seam weld				
LEAD COUNT:	78				
SEAL PERIMETER:	7.34				
LEAD FINISH:	gold				

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
ILC Data Device Corporation 30 Orville Drive Bohemia, NY 11716		19645	CEPB	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-90-657) EQ(EQC-91-606) EQ(EQC-93-625)				Power Data Converters	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Bohemia, NY FLOW: 41639 CAPABILITY: thick film on alumina, 3 conductor levels, resistors; thick film on beryllia, 1 conductor level, resistor			LOCATION: Bohemia, NY FLOW: 41638 CAPABILITY: thin film on alumina, 1 conductor level, resistors		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Bohemia, NY (Power Line) FLOW: 41634 CAPABILITY: polymer conductive epoxy; gold wire bonding			LOCATION: Bohemia, NY (Power Line) FLOW: 45552 CAPABILITY: polymer conductive/nonconductive epoxy and solder; gold and aluminum wire and copper/tin bracket (solder) bonding.		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors, molytabs SUBSTRATE ATTACH: polymer conductive/nonconductive epoxy, solder					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with axial leads	metal, with peripheral leads			
SEAL METHOD:	seam weld	seam weld			
LEAD COUNT:	24	16			
SEAL PERIMETER:	4.10	8.80			
LEAD FINISH:	gold	gold			
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER		CAGE CODE	SYMBOL CODE	PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements. The listing does not in anyway represent or imply interchangeability, equivalency.
ILC Data Device Corporation 105 Wilbur Place Bohemia, New York 11716		19645	CEPB	
SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-8604902ZX	1	BUS63105II	1553 Single Ch., Drvr./Rec., Low Power	Yes
5962-8604902TX	1	BUS63106II	1553 Single Ch., Drvr./Rec., Low Power	Yes
5962-8604902XC	1	BUS63105	1553 Single Ch., Drvr./Rec.	No
5962-8604905XX	1	BUS63100-617	1553 Single Ch., Drvr./Rec.	No
5962-8753501XA	1	BUS65112	1553 Remote Terminal Unit, Dual Redun.	Yes
5962-8753501YC	1	BUS65117	1553 Remote Terminal Unit, Dual Redun.	Yes
5962-8757902XX	1	BUS63125II	1553 Dual Ch., Drvr./Rec., Low Pwr., -15V	Yes
5962-8757902YC	1	BUS63126II	1553 Dual Ch., Drvr./Rec., Low Pwr., -15V	Yes
5962-8768701XC	1	RDC14505-638	400 Hz resolver to digital converter	Yes
5962-8768701YX	1	RDC14505-638C	400 Hz resolver to digital converter	No
5962-8768702XC	1	RDC14505-639	400 Hz resolver to digital converter	Yes
5962-8768702YX	1	RDC14505-639C	400 Hz resolver to digital converter	No
5962-8768703XC	1	RDC14505-641	400 Hz resolver to digital converter, 6v	No
5962-8768703YX	1	RDC14505-641C	400 Hz resolver to digital converter, 6v	No
5962-8851702XX	1	DAC02310-113	D/A Conv., 14-bit, deglitched	Yes
5962-8851702YX	1	DAC02311-113	D/A Conv., 14-bit, deglitched	No
5962-8851701XX	1	DAC02310-112	D/A Conv., 14-bit, deglitched	Yes
5962-8851701YX	1	DAC02311-112	D/A Conv., 14-bit, deglitched	No
5962-8854201XX	1	ADC00300-112	D/A Conv., 12-bit track/hold	Yes
5962-8854201YX	1	ADC00302-112	D/A conv., 12-bit track/hold	No
5962-8858601XX	1	BUS66300II883B	1553 Bus to microprocssor interface unit	Yes
5962-8858601YC	1	BUS66301II883	1553 Bus to microprocssor interface unit	No
5962-8869201XX	1	BUS61553II-604	1553 Advrnd. Intgrtd. MUX, 8K x 16 RAM	No
5962-8869201TX	1	BUS61563II-601	1553 Advrnd. Intgrtd. MUX, 8K x 16 RAM	Yes
5962-8869201YX	1	BUS61563II-602	1553 Advrnd. Intgrtd. MUX, 8k x 16 RAM	Yes
5962-8869201ZX	1	BUS61563II-617	1553 Advrnd. Intgrtd. MUX, 8k x 16 RAM	Yes
5962-8869202XX	1	BUS61554II-600	1553 Advrnd. Intgrtd. MUX, 8K x 16 RAM	Yes
5962-8869202YC	1	BUS61564II-600	1553 Advrnd. Intgrtd. MUX, 8K x 16 RAM	Yes
5962-8869202ZX	1	BUS61564II-601	1553 Advrnd. Intgrtd. MUX, 8K x 16 RAM	Yes
5962-8869203XC	1	BUS61555II-604	1553 Advrnd. Intgrtd. MUX, 8K x 16 RAM	Yes
5962-8869203YC	1	BUS61565II-600	1553 Advrnd. Intgrtd. MUX, 8K x 16 RAM	Yes
5962-8869203ZC	1	BUS61565II-603	1553 Advrnd. Intgrtd. MUX, 8K x 16 RAM	Yes
5962-8869204XC	1	BUS61556II-600	1553 Advrnd. Intgrtd. MUX, 8K x 16 RAM	Yes
5962-8944704HXC	1	BUS63135II	Dual channel, driver-reciever, rec.idle	Yes
5962-8944704HYC	1	BUS63136II	Dual channel, driver-reciever, rec.idle	No
5962-8949801XX	1	SDC14561III114	90 V, 400Hz, S/D converter 2.0 minutes	No
5962-8949802XX	1	SDC14561III115	90 V, 400Hz, S/D converter, 1.0 minutes	No
5962-8949901XX	1	SDC14560III114	S/D Conv, 11.8V, 400Hz, 2.0 min. Arc.	No
5962-8949902XX	1	SDC14560III115	S/D Conv, 11.8V, 400Hz, 1.0 min. Arc.	No
5962-8949903XC	1	SDC14560III605	S/D Conv, 11.8V, 400Hz, Prog. Res., 2 Mn.Arc	Yes
5962-8979801XX	1	BUS-65142	Remote terminal unit, dual redundant	No

MANUFACTURER	CAGE CODE	SYMBOL CODE
ILC Data Device Corporation 105 Wilbur Place Bohemia, New York 11716	19645	CEPB

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability or equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-8979801YX	1	BUS-65144	Remote terminal unit, dual redundant	No
5962-8979802XX	1	BUS-65143-883B	Remote terminal unit, dual redundant	No
5962-8979802YX	1	BUS-65145-883B	Remote terminal unit, dual redundant	No
5962-8982601XC	1	BUS63127II	Low power, dual channel, driver-reciever	Yes
5962-8982601YC	1	BUS63128II	Low power, dual channel, driver-reciever	Yes
5962-8990801XX	1	SDC14565-114	11.8V, 400 Hz, R/D converter, 2 min Arc.	No
5962-8990801YX	1	SDC14565-629	11.8V, 400 Hz, R/D converter, 2 min Arc.	No
5962-8990801ZX	1	SDC14565-621	11.8V, 400 Hz, R/D converter, 2 min Arc.	No
5962-8990802XX	1	SDC14565-115	11.8V, 400 Hz, R/D converter, 1 min Arc.	Yes
5962-8990802YX	1	SDC14565-630	11.8V, 400 Hz, R/D converter, 1 min Arc.	No
5962-8990802ZX	1	SDC14565-622	11.8V, 400 Hz, R/D converter, 1 min Arc.	No
5962-8990803XC	1	SDC14565-616	11.8V, 400 Hz, 80 Hz BW, R/D Converter	Yes
5962-8990803ZC	1	SDC14565-616C	11.8V, 400 Hz, 80 Hz BW, R/D Converter	No
5962-8990804XX	1	SDC14566-115	11.8V, 400 Hz, trimmed velocity, R/D conv.	Yes
5962-8990804YX	1	SDC14566-609	11.8V, 400 Hz, trimmed velocity, R/D conv.	No
5962-8990804ZX	1	SDC14566-608	11.8V, 400 Hz, trimmed velocity, R/D conv.	No
5962-8990805XX	1	SDC14565-618	7.0V, 400 Hz, 80 Hz bandwidth, R/D conv.	Yes
5962-8990805ZX	1	SDC14565-618C	7.0V, 400 Hz, 80 Hz bandwidth, R/D conv.	No
5962-8998601HXX	1	DSC11520-112	16 bit D/S and D/R converter, +/- 8 minutes	No
5962-8998602HXX	1	DSC11520-113	16 bit D/S and D/R converter, +/- 4 minutes	Yes
5962-8998603HXX	1	DSC11520-114	16 bit D/S and D/R converter, +/- 2 minutes	No
5962-8998604HXX	1	DSC11520-115	16 bit D/S and D/R converter, +/- 1 minutes	Yes
5962-9055101XC	1	SDC14567III111	DR/D converter, 400Hz, +/-6.0 min. acc.	Yes
5962-9055102XC	1	SDC14567III112	DR/D converter, 400Hz, +/-4.0 min. acc.	Yes
5962-9055103XC	1	SDC14567III114	DR/D converter, 400Hz, +/-2.0 min. acc.	Yes
5962-9055104XC	1	SDC14567III115	DR/D converter, 400Hz, +/-1.0 min. acc.	Yes
5962-9055105XC	1	SDC14569III111	DR/D converter, trim.vel., 400Hz, +/-6.0acc	Yes
5962-9055106XC	1	SDC14569III112	DR/D converter, trim.vel., 400Hz, +/-4.0acc	No
5962-9055107XC	1	SDC14569III114	DR/D converter, trim.vel., 400Hz, +/-2.0acc	No
5962-9055108XC	1	SDC14569III115	DR/D converter, trim.vel., 400Hz, +/-1.0acc.	No
5962-9055401XC	1	HSDC8915A883B	R/D or S/D converter, +/-2.6 arcmin acc.	No
5962-9055401XX	1	XDC14507-628	400 Hz, voltage follower buffer input, 2.6 min	No
5962-9055401YX	1	XDC14507-628	400 Hz, voltage follower buffer input, 2.6 min	No
5962-9055402XC	1	HSDC8915883B	R/D or S/D converter, +/-4.0 arcmin acc.	No
5962-9055402XX	1	XDC14507-627	400 Hz, voltage follower buffer input, 4.0 min	No
5962-9055402YX	1	XDC14507-627	400 Hz, voltage follower buffer input, 4.0 min	No
5962-9063401HXX	1	ADH030-II12-1	D/A converter, 12-bit	No
5962-9070701HXC	1	SDC14500-635	S/D converter, 400Hz, 11.8v, acc. +/-2.6	No
5962-9070701HXX	1	SDC14500-635	S/D converter, 400Hz, 11.8v, acc. +/-2.6	Yes
5962-9070701HYX	1	SDC14500-635	S/D converter, 400Hz, 11.8v, acc. +/-2.6	No
5962-9070702HXC	1	SDC14500-636	S/D converter, 400Hz, 11.8v, acc. +/-4.0	Yes
5962-9070702HXX	1	SDC14500-636	S/D converter, 400Hz, 11.8v, acc. +/-4.0	Yes

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HYBRID MICROCIRCUITS

QML-38534-17

MANUFACTURER		CAGE CODE	SYMBOL CODE	PRODUCT ELIGIBILITY:The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements. The listing does not in anyway represent or imply interchangeability, equivalency.
ILC Data Device Corporation 105 Wilbur Place Bohemia, New York 11716		19645	CEPB	
SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-9070702HYX	1	SDC14500-636	S/D converter,400Hz,11.8v,acc.+/-4.0	No
5962-9070703HXC	1	SDC14502-605	S/D converter,400Hz,11.8v,acc.+/-2.6	No
5962-9070703HXX	1	SDC14502-605	S/D converter,60Hz, 90.0v,acc. 2.6 min	No
5962-9070703HYX	1	SDC14502-605	S/D converter,60Hz, 90.0v,acc. 2.6 min	No
5962-9070704HXC	1	SDC14502-606	S/D converter,400Hz,11.8v,acc.+/-4.0	Yes
5962-9070704HXX	1	SDC14502-606	S/D converter,60Hz, 90.0v,acc. 4.0 min	Yes
5962-9070704HYX	1	SDC14502-608	S/D converter,60Hz, 90.0v,acc. 4.0 min	No
5962-9082001HXC	1	SDC14531-690	11.8 V, 400Hz, S-R/D converter	No
5962-9082002HXC	1	SDC14531-631	11.8 V, 400Hz, S-R/D converter	Yes
5962-9173401HXX	1	BUS61559	MIL-STD-1553, BC/RTU/MT, multiplexed terminal	Yes
5962-9173401HYX	1	BUS61569	MIL-STD-1553, BC/RTU/MT, multiplexed terminal	Yes
5962-9173401HZX	1	BUS61569	MIL-STD-1553, BC/RTU/MT, multiplexed terminal	No
5962-9173402HXX	1	BUS61560	MIL-STD-1553, BC/RTU/MT, multiplexed terminal	No
5962-9173402HYX	1	BUS61570	MIL-STD-1553, BC/RTU/MT, multiplexed terminal	No
5962-9173402HZX	1	BUS61570	MIL-STD-1553, BC/RTU/MT, multiplexed terminal	No
5962-9173403HXX	1	BUS61561	MIL-STD-1553, BC/RTU/MT, multiplexed terminal	Yes
5962-9173403HYX	1	BUS61571	MIL-STD-1553, BC/RTU/MT, multiplexed terminal	No
5962-9173403HZX	1	BUS61571	MIL-STD-1553, BC/RTU/MT, multiplexed terminal	No
5962-9173404HXX	1	BUS61559-601	MIL-STD-1760, BC/RTU/MT, multiplexed terminal	Yes
5962-9173404HYX	1	BUS61569-601	MIL-STD-1760, BC/RTU/MT, multiplexed terminal	No
5962-9173404HZX	1	BUS61569-601	MIL-STD-1760, BC/RTU/MT, multiplexed terminal	No
5962-9173601HXX	1	SDC14600-112	14 bit, 11.8V S/D converter, 400Hz, 4 min, VEL	No
5962-9173602HXX	1	SDC14600T-112	14 bit, 11.8V S/D converter, 400Hz, 4 min, BIT	No
5962-9173603HXX	1	SDC14601-112	14 bit, 11.8V R/D converter, 400Hz, 4 min, VEL	No
5962-9173604HXX	1	SDC14601T-112	14 bit, 11.8V R/D converter, 400Hz, 4 min, BIT	No
5962-9173605HXX	1	SDC14605-112	16 bit, 11.8V S/D converter, 400Hz, 4 min, VEL	No
5962-9173606HXX	1	SDC14605T-112	16 bit, 11.8V S/D converter, 400Hz, 4 min, BIT	No
5962-9173607HXX	1	SDC14606-112	16 bit, 11.8V R/D converter, 400Hz, 4 min, VEL	No
5962-9173608HXX	1	SDC14606T-112	16 bit, 11.8V R/D converter, 400Hz, 4 min, BIT	No
5962-9173609HXX	1	SDC14605-114	16 bit, 11.8V S/D converter, 400Hz, 2 min, BIT	No
5962-9173610HXX	1	SDC14605T-112	16 bit, 11.8V S/D converter, 400Hz, 2 min, BIT	No
5962-9173611HXX	1	SDC14606-114	16 bit, 11.8V R/D converter, 400Hz, 2 min, BIT	No
5962-9173612HXX	1	SDC14606T-112	16 bit, 11.8V R/D converter, 400Hz, 2 min, BIT	No
5962-9204801HXX	1	SDC14570-112	14 bit, 11.8V S/D converter, 400Hz, 4 min	No
5962-9204802HXX	1	SDC14571-112	14 bit, 11.8V R/D converter, 400Hz, 4 min	No
5962-9204803HXX	1	SDC14575-112	14/16 bit, 11.8V S/D converter, 400Hz, 4 min	No
5962-9204804HXX	1	SDC14576-112	14/16 bit, 11.8V R/D converter, 400Hz, 4 min	No
5962-9204805HXX	1	SDC14575-114	14/16 bit, 11.8V S/D converter, 400Hz, 4 min	No
5962-9204806HXX	1	SDC14576-114	14/16 bit, 11.8V R/D converter, 400Hz, 4 min	Yes
5962-9204901HXX	1	SDC14572-112	14 bit, 90.0V S/D converter, 400Hz, 4 min	No
5962-9204902HXX	1	SDC14574-112	14 bit, 90.0V S/D converter, 60Hz, 4 min	No

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HYBRID MICROCIRCUITS
QML-38534-17

MANUFACTURER	CAGE CODE	SYMBOL CODE
ILC Data Device Corporation 105 Wilbur Place Bohemia, New York 11716	19645	CEPB

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

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SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-9204903HXX	1	SDC14577-112	14/16 bit, 90.0V S/D converter, 400Hz, 4 min	No
5962-9204904HXX	1	SDC14579-112	14/16 bit, 90.0V S/D converter, 60Hz, 4 min	No
5962-9204905HXX	1	SDC14577-114	14/16 bit, 90.0V S/D converter, 400Hz, 2 min	No
5962-9204906HXX	1	SDC14579-114	14/16 bit, 90.0V S/D converter, 60Hz, 2 min	No
5962-9205001HXX	1	SDC14573-112	14 bit, 2 V direct/R convert, 400 Hz, 4 min	No
5962-9205002HXX	1	SDC14578-112	14/16 bit, 2 V direct/R convert, 400 Hz, 4 min	No
5962-9205003HXX	1	SDC14578-114	14/16 bit, 2 V direct/R convert, 400 Hz, 2 min	No
5962-9205101HXX	1	SDC14602-112	14 bit, 90.0V S/D converter, 400 Hz, 4 min, VEL	No
5962-9205102HXX	1	SDC14602T-112	14 bit, 90.0V S/D converter, 400 Hz, 4 min, BIT	No
5962-9205103HXX	1	SDC14604-112	14 bit, 90.0V S/D converter, 60 Hz, 4 min, VEL	No
5962-9205104HXX	1	SDC14604T-112	14 bit, 90.0V S/D converter, 60 Hz, 4 min, BIT	No
5962-9205105HXX	1	SDC14607-112	16 bit, 90.0V S/D converter, 400 Hz, 4 min, VEL	No
5962-9205106HXX	1	SDC14607T-112	16 bit, 90.0V S/D converter, 400 Hz, 4 min, BIT	No
5962-9205107HXX	1	SDC14609-112	16 bit, 90.0V S/D converter, 60 Hz, 4 min, VEL	No
5962-9205108HXX	1	SDC14609T-112	16 bit, 90.0V S/D converter, 60 Hz, 4 min, BIT	No
5962-9205109HXX	1	SDC14607-114	16 bit, 90.0V S/D converter, 400 Hz, 2 min, VEL	No
5962-9205110HXX	1	SDC14607T-114	16 bit, 90.0V S/D converter, 400 Hz, 2 min, BIT	No
5962-9205111HXX	1	SDC14609-114	16 bit, 90.0V S/D converter, 60 Hz, 2 min, VEL	No
5962-9205112HXX	1	SDC14609T-114	16 bit, 90.0V S/D converter, 60 Hz, 2 min, BIT	No
5962-9205201HXX	1	SDC14603-112	14 bit, 2 V direct/R convert, 400 Hz, 4 min, VEL	No
5962-9205202HXX	1	SDC14603T-112	14 bit, 2 V direct/R convert, 400 Hz, 4 min, BIT	No
5962-9205203HXX	1	SDC14608-112	16 bit, 2 V direct/R convert, 400 Hz, 4 min, VEL	No
5962-9205204HXX	1	SDC14608T-112	16 bit, 2 V direct/R convert, 400 Hz, 4 min, BIT	No
5962-9205205HXX	1	SDC14608-114	16 bit, 2 V direct/R convert, 400 Hz, 2 min, VEL	No
5962-9205206HXX	1	SDC14608T-114	16 bit, 2 V direct/R convert, 400 Hz, 2 min, BIT	No
5962-9205301HXX	1	SDC14610-112	14 bit, 11.8V S/D converter, 400Hz, 4 min, VEL	No
5962-9205302HXX	1	SDC14610T-112	14 bit, 11.8V S/D converter, 400Hz, 4 min, BIT	Yes
5962-9205303HXX	1	SDC14611-112	14 bit, 11.8V R/D converter, 400Hz, 4 min, VEL	No
5962-9205304HXX	1	SDC14611T-112	14 bit, 11.8V R/D converter, 400Hz, 4 min, BIT	No
5962-9205305HXX	1	SDC14615-112	16 bit, 11.8V S/D converter, 400Hz, 4 min, VEL	No
5962-9205306HXX	1	SDC14615T-112	16 bit, 11.8V R/D converter, 400Hz, 4 min, BIT	No
5962-9205307HXX	1	SDC14616-112	16 bit, 11.8V R/D converter, 400Hz, 4 min, VEL	No
5962-9205308HXX	1	SDC14616T-112	16 bit, 11.8V R/D converter, 400Hz, 4 min, BIT	No
5962-9205309HXX	1	SDC14615-114	16 bit, 11.8V R/D converter, 400Hz, 2 min, VEL	No
5962-9205310HXX	1	SDC14615T-114	16 bit, 11.8V R/D converter, 400Hz, 2 min, BIT	No
5962-9205311HXX	1	SDC14616-114	16 bit, 11.8V R/D converter, 400Hz, 2 min, VEL	No
5962-9205312HXX	1	SDC14616T-114	16 bit, 11.8V R/D converter, 400Hz, 2 min, BIT	No
5962-9205401HXX	1	SDC14612-112	14 bit, 90.0V S/D converter, 400 Hz, 4 min, VEL	No
5962-9205402HXX	1	SDC14612T-112	14 bit, 90.0V S/D converter, 400 Hz, 4 min, BIT	No
5962-9205403HXX	1	SDC14614-112	14 bit, 90.0V S/D converter, 60 Hz, 4 min, VEL	No
5962-9205404HXX	1	SDC14614T-112	14 bit, 90.0V S/D converter, 60 Hz, 4 min, BIT	No

MANUFACTURER	CAGE CODE	SYMBOL CODE
ILC Data Device Corporation 105 Wilbur Place Bohemia, New York 11716	19645	CEPB

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-9205405HXX	1	SDC14617-112	16 bit, 90.0V S/D converter, 400 Hz, 4 min, VEL	No
5962-9205406HXX	1	SDC14617T-112	16 bit, 90.0V S/D converter, 400 Hz, 4 min, BIT	No
5962-9205407HXX	1	SDC14619-112	16 bit, 90.0V S/D converter, 60 Hz, 4 min, VEL	No
5962-9205408HXX	1	SDC14619T-112	16 bit, 90.0V S/D converter, 60 Hz, 4 min, BIT	No
5962-9205409HXX	1	SDC14617-114	16 bit, 90.0V S/D converter, 400 Hz, 2 min, VEL	No
5962-9205410HXX	1	SDC14617T-114	16 bit, 90.0V S/D converter, 400 Hz, 2 min, BIT	No
5962-9205411HXX	1	SDC14619-114	16 bit, 90.0V S/D converter, 60 Hz, 2 min, VEL	No
5962-9205412HXX	1	SDC14619T-114	16 bit, 90.0V S/D converter, 60 Hz, 2 min, BIT	No
5962-9205501HXX	1	SDC14613-112	14 bit, 2 V direct/R convert, 400 Hz, 4 min, VEL	No
5962-9205502HXX	1	SDC14613T-112	14 bit, 2 V direct/R convert, 400 Hz, 4 min, BIT	No
5962-9205503HXX	1	SDC14618-112	16 bit, 2 V direct/R convert, 400 Hz, 4 min, VEL	No
5962-9205504HXX	1	SDC14618T-112	16 bit, 2 V direct/R convert, 400 Hz, 4 min, BIT	No
5962-9205505HXX	1	SDC14618-114	16 bit, 2 V direct/R convert, 400 Hz, 2 min, VEL	No
5962-9205506HXX	1	SDC14618T-114	16 bit, 2 V direct/R convert, 400 Hz, 2 min, BIT	No
5962-9216201HXX	1	BUS65153	Small terminal interface circuit (STIC), -15 V	Yes
5962-9216201HYX	1	BUS65163	Small terminal interface circuit (STIC), -15 V	Yes
5962-9216202HXX	1	BUS65154	Small terminal interface circuit (STIC), -12 V	No
5962-9216202HYX	1	BUS65164	Small terminal interface circuit (STIC), -12 V	No
5962-9306501HXX	1	BU65170D1	MIL-STD-1553, RT, 4K RAM, +5/-15 V, TRANSCEIVER	No
5962-9306501HYX	1	BU65170F1	MIL-STD-1553, RT, 4K RAM, +5/-15 V, TRANSCEIVER	No
5962-9306501HZX	1	BU65170J1	MIL-STD-1553, RT, 4K RAM, +5/-15 V, TRANSCEIVER	No
5962-9306502HXX	1	BU65170D2	MIL-STD-1553, RT, 4K RAM, +5/-12 V, TRANSCEIVER	No
5962-9306502HYX	1	BU65170F2	MIL-STD-1553, RT, 4K RAM, +5/-12 V, TRANSCEIVER	No
5962-9306502HZX	1	BU65170J2	MIL-STD-1553, RT, 4K RAM, +5/-12 V, TRANSCEIVER	No
5962-9306503HXX	1	BU65180D1	MIL-STD-1553, BC/RT/MT, 4K RAM, +5/-15 V, TRANSCEIVER	No
5962-9306503HYX	1	BU65180F1	MIL-STD-1553, BC/RT/MT, 4K RAM, +5/-15 V, TRANSCEIVER	No
5962-9306503HZX	1	BU65180J1	MIL-STD-1553, BC/RT/MT, 4K RAM, +5/-15 V, TRANSCEIVER	No
5962-9306504HXX	1	BU65180D2	MIL-STD-1553, BC/RT/MT, 4K RAM, +5/-12 V, TRANSCEIVER	No
5962-9306504HYX	1	BU65180F2	MIL-STD-1553, BC/RT/MT, 4K RAM, +5/-12 V, TRANSCEIVER	No
5962-9306504HZX	1	BU65180J2	MIL-STD-1553, BC/RT/MT, 4K RAM, +5/-12 V, TRANSCEIVER	No
5962-9306505HXX	1	BU65171D1	MIL-STD-1553, RT, 4K RAM, +5/-15 V, TRANSCEIVER, RT LATCH	No
5962-9306505HYX	1	BU65171F1	MIL-STD-1553, RT, 4K RAM, +5/-15 V, TRANSCEIVER, RT LATCH	No
5962-9306505HZX	1	BU65171J1	MIL-STD-1553, RT, 4K RAM, +5/-15 V, TRANSCEIVER, RT LATCH	No
5962-9306506HXX	1	BU65171D2	MIL-STD-1553, RT, 4K RAM, +5/-12 V, TRANSCEIVER, RT LATCH	No
5962-9306506HYX	1	BU65171F2	MIL-STD-1553, RT, 4K RAM, +5/-12 V, TRANSCEIVER, RT LATCH	No
5962-9306506HZX	1	BU65171J2	MIL-STD-1553, RT, 4K RAM, +5/-12 V, TRANSCEIVER, RT LATCH	No
5962-9306507HXX	1	BU65181D1	MIL-STD-1553, BC/RT/MT, 4K RAM, +5/-15 V, TRANSCEIVER, RT LATCH	No
5962-9306507HYX	1	BU65181F1	MIL-STD-1553, BC/RT/MT, 4K RAM, +5/-15 V, TRANSCEIVER, RT LATCH	No
5962-9306507HZX	1	BU65181J1	MIL-STD-1553, BC/RT/MT, 4K RAM, +5/-15 V, TRANSCEIVER, RT LATCH	No
5962-9306508HXX	1	BU65181D2	MIL-STD-1553, RT, 4K RAM, +5/-12 V, TRANSCEIVER, RT LATCH	No

MANUFACTURER	CAGE CODE	SYMBOL CODE
ILC Data Device Corporation 105 Wilbur Place Bohemia, New York 11716	19645	CEPB

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-9306508HYX	1	BU65181F2	MIL-STD-1553, RT, 4K RAM, +5/-12 V, TRANSCEIVER, RT LATCH	No
5962-9306508HZX	1	BU65181J2	MIL-STD-1553, RT, 4K RAM, +5/-12 V, TRANSCEIVER, RT LATCH	No

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 44

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Interpoint Corporation 10301 Willows Road Redmond, WA 98073		50821	CEUU	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQM-87-2838) EQ(EQC-92-300) EQ(EQC-93-196) EQ(EQC-93-550) EQ(EQM-94-0111) EQ(EQM-89-0439) EQ(EQC-93-056) EQ(EQC-93-221) EQC-93-684 EQ(EQC-92-174) EQ(EQC-93-031) EQ(EQC-93-280) EQ(EQM-94-043)				Linear Amplifier DC/DC Converters Signal Processor Analog Data Converters Digital	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Redmond, WA FLOW: QA-039 CAPABILITY: thick film on alumina, 3 conductor levels, resistors, thick film on beryllia, 3 conductor levels, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Redmond, WA FLOW: QA-039 CAPABILITY: polymer conductive/nonconductive epoxy and solder; copper(solder) and gold and aluminum wire bonding ADD-ON ELEMENTS: unpackaged die, chip capacitors, tantalum capacitors, chip resistors, toroid, inductors, tabs SUBSTRATE ATTACH: polymer nonconductive epoxy and solder solder *(Maximum constant acceleration level qualified 7500g, inductors & toroids)			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with axial leads	metal, with peripheral leads	metal, with axial leads		
SEAL METHOD:	seam weld	seam weld	projection weld		
LEAD COUNT:	38	32	8		
SEAL PERIMETER:	6.0	4.00	4.26		
LEAD FINISH:	gold & solder	gold & solder	gold		
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Interpoint Corporation 10301 Willows Road Redmond, Washington 98073	50821	CEUU

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-9160101HXX	1	MHF-2815S/883	DC/DC conv., 15V, 15W out, single ch.	No
5962-9161401HXX	1	MHF-2815D/883	DC/DC conv., 15V, 15W out, dual ch.	Yes
5962-9166401HXX	1	MHF-2815S/883	DC/DC conv., 15V, 15W out, single ch.	No
5962-9213901HXX	1	MHF-2805S/883	DC/DC conv., 15V, 15W out, single ch.	Yes
5962-9214401HXX	1	MHF-2812D/883	DC/DC conv., 15V, 15W out, dual ch.	No
5962-9308901HXX	1	MSA2812D/883	DC/DC conv., 12V, 5W out, dual ch.	No
5962-9309001HXX	1	MSA2815D/883	DC/DC conv., 15V, 5W out, dual ch.	No
5962-9309201HXX	1	MSA2805S/883	DC/DC conv., 5V, 5W out, dual ch.	No
5962-9309301HXX	1	MSA2812S/883	DC/DC conv., 12V, 5W out, dual ch.	No
5962-9309401HXX	1	MSA2815S/883	DC/DC conv., 15V, 5W out, dual ch.	No

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 2

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
ITT Avionics Division 100 Kingsland Road Clifton, NJ 07014		28527	CEWQ	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQM-88-1955) EQ(EQC-91-556) EQ(EQC-91-367) EQ(EQC-91-875) EQ(EQC-91-543) EQ(EQC-91-812)				Memory Custom	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Clifton, NJ FLOW: TFH-102 CAPABILITY: thick film on alumina, 8 conductor levels, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Clifton, NJ FLOW: TFH-103 CAPABILITY: polymer conductive/nonconductive epoxy; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors, ceramic posts, tabs SUBSTRATE ATTACH: polymer nonconductive/conductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with axial leads	metal, with peripheral leads			
SEAL METHOD:	seam weld	seam weld			
LEAD COUNT:	78	94			
SEAL PERIMETER:	7.94	9.16			
LEAD FINISH:	gold	gold			
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
ITT Avionics Division 100 Kingsland Road Clifton, New Jersey 07014	28527	CEWQ

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u>	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 0

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HYBRID MICROCIRCUITS
QML-38534-17

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Lockheed Sanders, Incorporated Microwave Technology Center 65 Spit Brook Road Nashua, NH 03061-2041		94117	(TBD)	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-92-467)				Voltage Regulator IFM Decoder Attenuators	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Nashua, NH FLOW: MEC-OI-7-017 CAPABILITY: thick film on alumina, 4 conductor levels, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Nashua, NH FLOW: MEC-OI-7-017 CAPABILITY: polymer conductive/nonconductive epoxy; aluminum and gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors, tantalum capacitors SUBSTRATE ATTACH: polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with peripheral leads				
SEAL METHOD:	seam weld				
LEAD COUNT:	88				
SEAL PERIMETER:	7.2				
LEAD FINISH:	gold				
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Lockheed Sanders, Incorporated Microwave Technology Center 65 Spit Brook Road Nashua, NH 03061-2041	94117	(TBD)

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.
The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 0				

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HYBRID MICROCIRCUITS
QML-38534-17

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
M.S. Kennedy Corporation 8170 Thompson Road Cicero, NY 13039-9393		51651	CFAA	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-90-451) EQ(EQC-93-141) EQ(EQC-93-488) EQ(EQC-93-687) EQ(EQC-90-507) EQ(EQC-93-242) EQ(EQC-93-554) EQ(EQM-94-084) EQ(EQC-92-417) EQ(EQC-93-346) EQ(EQC-93-682) EQ(EQM-94-093)				High Power DC Amplifier	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Cicero, NY FLOW: 2422-1563 CAPABILITY: thick film on alumina, 2 conductor level, resistors; thick film on alumina, 4 conductor levels.			LOCATION: Cicero, NY FLOW: 2422-1563 CAPABILITY: thick film on beryllia, 2 conductor levels, resistors		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Cicero, NY FLOW: 2422-1518 CAPABILITY: polymer conductive/nonconductive epoxy, eutectic; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors, inductor SUBSTRATE ATTACH: polymer conductive/nonconductive epoxy, solder **(Maximum constant acceration level qualified 7500 g.)					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	T0 can	platform	metal, with axial leads **		
SEAL METHOD:	projection weld	projection weld	seam weld		
LEAD COUNT:	12	14	44		
SEAL PERIMETER:	3.14	2.60	5.0		
LEAD FINISH:	gold	gold	gold		
PACKAGE TYPE:	metal, with peripheral leads **				
SEAL METHOD:	seam weld				
LEAD COUNT:	38				
SEAL PERIMETER:	6.95				
LEAD FINISH:	gold				

MANUFACTURER	CAGE CODE	SYMBOL CODE
M.S. Kennedy Corporation 8170 Thompson Road Cicero, NY 13039-9393	51651	CFAA

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-9090201HXX	1	MSK332B-12	FET input closed loop buffer amplifier	Yes
5962-9090202HXX	1	MSK332B-15	FET input closed loop buffer amplifier	No
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 0				

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Marconi Circuit Technology Corporation 160 Smith Street Farmingdale, NY 11735		32116	(TBD)	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-91-369) EQ(EQC-93-538) EQ(EQC-93-189) EQ(EQM-94-034) EQ(EQC-93-296)				Digital	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Farmingdale, NY FLOW: 11-2915 CAPABILITY: thick film on alumina, 6 conductor level, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Farmingdale, NY FLOW: 11-2915 CAPABILITY: polymer conductive/nonconductive epoxy and eutectic, gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, tabs, chip resistors SUBSTRATE ATTACH: solder, polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with peripheral leads	metal, with axial leads	platform		
SEAL METHOD:	seam weld	seam weld	projection weld		
LEAD COUNT:	88	90	24		
SEAL PERIMETER:	7.92	7.82	3.93		
LEAD FINISH:	gold	gold	gold		
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Marconi Circuit Technology Corporation 160 Smith Street Farmingdale NY 11735	32116	(TBD)

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-8757907XX	1	CT1487-D	1553 Dual ch. Drvr/Rec, Low Pwr -15V	No
5962-8757907YX	1	CT1487-DFP	1553 Dual ch. Drvr/Rec, Low Pwr -15V	No
5962-8982606XX	1	CT1589-D	1553 Driver/Receiver, Dual Channel	No
5962-8982606YX	1	CT1589-DFP	1553 Driver/Receiver, Dual Channel	No
5962-9063601XX	1	CT1820	1553 Data terminal bit processor	No
5962-9063602XX	1	CT1820-2	1553 Data terminal bit processor	No
5962-9063602YX	1	CT1820-2FP	1553 Data terminal bit processor	No
5962-9082908HXX	1	CT1589-M	1553 Driver/Receiver, Single Channel	No
5962-9082908HYX	1	CT1589-MI	1553 Driver/Receiver, Single Channel	No

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 2

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HYBRID MICROCIRCUITS

QML-38534-17

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Martin Marietta Building E-8 12506 Lake Underhill Drive Orlando, FL 32862-8007		04939	(TBD)	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-91-402) EQ(EQC-92-312) EQ(EQC-91-764) EQ(EQC-92-412) EQ(EQC-92-112)				Analog	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Orlando, FL FLOW: 72301772 CAPABILITY: thick film on alumina, 6 conductor level, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Orlando, FL FLOW: 72301772 CAPABILITY: polymer conductive/nonconductive epoxy; gold and aluminum wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors, inductors, tantalum Capacitors SUBSTRATE ATTACH: polymer nonconductive epoxy ** (Maximum constant acceleration level qualified 7500 g.)					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	ceramic leadless chip carrier	ceramic dual-in-line	platform		
SEAL METHOD:	solder	solder	projection weld		
LEAD COUNT:	68	18	44		
SEAL PERIMETER:	3.8	2.88	5.76		
LEAD FINISH:	gold	gold & solder	gold		
PACKAGE TYPE:	metal, with axial leads **				
SEAL METHOD:	seam weld				
LEAD COUNT:	140				
SEAL PERIMETER:	11.8				
LEAD FINISH:	gold				

MANUFACTURER	CAGE CODE	SYMBOL CODE
Martin Marietta Building E-8 12505 Lake Underhill Drive Orlando, FL 32862-8007	04939	(TBD)

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 2				

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Micro-Rel Division Medtronics Incorporated 2343 West Tenth Place Tempe, AZ 85281		8K957	CEUZ	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-91-417) EQ(EQC-91-727) EQ(EQC-92-136)				Linear 1553 Bus	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Tempe, AZ FLOW: 1403818 CAPABILITY: co-fire on alumina, 5 conductor levels			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Tempe, AZ FLOW: 1403818 CAPABILITY: polymer conductive/nonconductive epoxy; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors SUBSTRATE ATTACH: solder					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	leadless chip carrier	metal, with axisle leads		ceramic co-fire, peripheral leads	
SEAL METHOD:	solder	seam weld		seam weld	
LEAD COUNT:	76	36		36	
SEAL PERIMETER:	3.5	4.36		3.87	
LEAD FINISH:	solder	gold & solder		gold & solder	
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Micro-Rel Division Medtronic Incorporated 2343 West Tenth Place Tempe, Arizona 85281	8K957	CEUZ

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-8757908XC	1	MR63125MPR	low power, dual channel, driver-receiver	Yes
5962-9174905HZX	1	MR3231MP5	single channel, driver-receiver	No
5962-9174906HZX	1	MR3232MP2	single channel, driver-receiver	No
5962-9174907HZX	1	MR3232MP5	single channel, driver-receiver	No

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 3

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HYBRID MICROCIRCUITS

QML-38534-17

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Micro Networks Company 324 Clarke Street Worcester, MA 01606		50507	CEVQ	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQM-88-0709) EQ(EQC-92-062) EQ(EQC-91-235) EQ(EQC-93-162) EQ(EQC-91-894) EQ(EQC-94-008)				Data Converters Track and Hold Amplifier	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Worcester, MA FLOW: FC-23 CAPABILITY: thin film on alumina, 1 conductor level, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Worcester, MA FLOW: FC-25 CAPABILITY: polymer conductive/non-conductive epoxy, eutectic; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors SUBSTRATE ATTACH: polymer non-conductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	ceramic dual-in-line	leadless chip carrier			
SEAL METHOD:	seam weld	solder			
LEAD COUNT:	62	22			
SEAL PERIMETER:	7.48	1.134			
LEAD FINISH:	gold & solder	solder			
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Micro Networks Company 324 Clarke Street Worcester, Massachusetts 01606	50507	CEVQ

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-8768801XX	1	MN3008H/B	D/A Conv., 8-bit, 0 to 4V output	Yes
5962-8768802XX	1	MN3009H/B	D/A Conv., 8-bit, -2V to +2V Output	No
5962-8850802XX	1	MNADC87H/B	12-bit A/D converter, 8 micro sec.	No
5962-8953102HYX	1	MN3292T/B-V	16-bit D/A converter; +10 V output	Yes
5962-8953103HYX	1	MN3290T/B-V	16-bit D/A converter; 0 to 10 V output	Yes
5962-8953104HYX	1	MN3291T/B-V	16-bit D/A converter; +5 V output	No
5962-8956301HXX	1	MN5290H/B	A/D converter, 16-bit resolution	No
5962-8956302HXX	1	MN5291H/B	A/D converter, 16-bit resolution	No
5962-8956901HXX	1	MN5295H/B	A/D Conv., 16-bit	No
5962-8958301YX	1	MN5200H/B	A/D Conv., 12-bit, 0 to -10V, Int. Comp.	No
5962-8958302YX	1	MN5203H/B	A/D Conv., 12-bit, -5 to +5V, Int. Comp.	No
5962-8958303YX	1	MN5201H/B	A/D Conv., 12-bit, -10 to +10V, Int. Comp.	No
5962-8958304YX	1	MN5204H/B	A/D Conv., 12-bit, 0 to -10V, Ext. Comp.	No
5962-8958305YX	1	MN5202H/B	A/D Conv., 12-bit, -5 to +5V, Ext. Comp.	No
5962-8958306YX	1	MN5205H/B	A/D Conv., 12-bit, -10 to +10V, Ext. Comp.	No
5962-8958307YX	1	MN5206H/B	A/D Conv., 12-bit, 0 to +10V, Int. Comp.	No
5962-8958401YX	1	MN5210H/B	A/D Conv., 12-bit, 0 to -10V, Int. Comp., HS	No
5962-8958402YX	1	MN5213H/B	A/D Conv., 12-bit, -5 to +5V, Int. Comp., HS	Yes
5962-8958403YX	1	MN5211H/B	A/D Conv., 12-bit, -10 to +10V, Int. Comp., HS	Yes
5962-8958404YX	1	MN5214H/B	A/D Conv., 12-bit, 0 to -10V, Ext. Comp., HS	No
5962-8958405YX	1	MN5212H/B	A/D Conv., 12-bit, -5 to +5V, Ext. Comp., HS	No
5962-8958406YX	1	MN5215H/B	A/D Conv., 12-bit, -10 to +10V, Ext. Comp., HS	Yes
5962-8958407YX	1	MN5216H/B	A/D Conv., 12-bit, 0 to +10V, Int. Comp., HS	Yes
5962-8959501XX <u>5</u> /	1	MN5245H/B	A/D Conv., 12-bit, 0 to +5V	Yes
5962-8959502XX <u>5</u> /	1	MN5245AH/B	A/D Conv., 12-bit, 0 to +5 V, 3-State output	No
5962-8959503XX <u>5</u> /	1	MN5246H/B	A/D Conv., 12-bit, +/- 2.5 V	Yes
5962-8959504XX <u>5</u> /	1	MN5246AH/B	A/D Conv., 12-bit, +/-2.5V, 3-State output	No
5962-8971801XX	1	MN3020H/B	D/A Conv., 8-bit, with input register	No
5962-9057001HXX	1	MN3860H/B	12-bit, D/A converter with input reg.	No
5962-9073001HXX	1	MN376H/B	High speed track and hold amplifier	No
5962-9079701HXX	1	MN7140H/B	12-bit, 8 channel, data acquisition sys.	No

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 200

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Microsystem Engineering Incorporated 6024 Southwest Jean Road Lake Oswego, OR 97034		75800	CFAU	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-90-619) EQ(EQC-93-152) EQ(EQC-91-737) EQ(EQC-93-147)				Power Digital	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Lake Oswego, OR FLOW: 3100002 CAPABILITY: thick film on alumina, 2 conductor levels, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Lake Oswego, OR FLOW: 3100001 CAPABILITY: polymer conductive/nonconductive epoxy, eutectic, solder; gold and aluminum wire bonding ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors SUBSTRATE ATTACH: polymer nonconductive epoxy			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with axial leads	ceramic, dual-in-line			
SEAL METHOD:	seam weld	seam weld			
LEAD COUNT:	34	30			
SEAL PERIMETER:	5.0	5.0			
LEAD FINISH:	gold	gold			
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Microsystem Engineering Incorporated 6024 Southwest Jean Road Lake Oswego, OR 97034	75800	CFAU

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 0				

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Micropac Industries, Incorporated 905 East Walnut Street Garland, TX 75040		31757	CEJG	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-91-178) EQ(EQC-92-258) EQ(EQC-91-647) EQ(EQC-92-183)				Custom	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Garland, TX (Hybrid Line) FLOW: 90138 CAPABILITY: thick film on alumina, 5 conductor level, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Garland, TX (Hybrid Line) FLOW: 90138 CAPABILITY: polymer conductive/nonconductive epoxy; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors SUBSTRATE ATTACH: solder, polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with axial leads	metal, with peripheral leads			
SEAL METHOD:	seam weld	seam weld			
LEAD COUNT:	28	46			
SEAL PERIMETER:	5.0	5.0			
LEAD FINISH:	gold & solder	gold & solder			
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Micropac Industries, Incorporated 912 East Walnut Street Garland, TX 75040	31757	CEJG	N/A	H
QUALIFICATION LETTER(S)			TECHNOLOGY TYPES	
EQ(EQC-90-625) EQ(EQC-92-183) EQ(EQC-91-328) EQ(EQC-92-258) EQ(EQC-91-338)			Power	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>				
LOCATION: Garland, TX (Power Line) FLOW: 90138 CAPABILITY: thick film on alumina, 1 conductor level, resistors; thick film on beryllia, 2 conductor level, resistors		LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>				
LOCATION: Garland, TX (Power Line) FLOW: 90138 CAPABILITY: polymer conductive epoxy and solder; gold and aluminum wire bonding		LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors SUBSTRATE ATTACH: polymer nonconductive epoxy, solder				
PACKAGE INFORMATION <u>1/ 2/ 3/</u>				
PACKAGE TYPE:	T0 can			
SEAL METHOD:	projection weld			
LEAD COUNT:	2			
SEAL PERIMETER:	2.27			
LEAD FINISH:	gold & solder			
PACKAGE TYPE:				
SEAL METHOD:				
LEAD COUNT:				
SEAL PERIMETER:				
LEAD FINISH:				

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Micropac Industries, Incorporated 725 East Walnut Street Garland, TX 75040		31757	CEJG	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-90-624) EQ(EQC-92-120) EQ(EQC-91-188) EQ(EQC-91-466)				Power	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Garland, TX (Optocoupler Line) FLOW: 90138 CAPABILITY: thick film on alumina, 2 conductor level, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Garland, TX (Optocoupler Line) FLOW: 90138 CAPABILITY: polymer conductive epoxy; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die SUBSTRATE ATTACH: polymer conductive/nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	ceramic dual-in-line	leadless chip carrier	TO can (dual base)		
SEAL METHOD:	solder	solder	projection weld		
LEAD COUNT:	16	24	7		
SEAL PERIMETER:	1.89	1.60	.54		
LEAD FINISH:	gold & solder	solder	gold & solder		
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Micropac Industries, Incorporated 725, 905 & 925 East Walnut Street Garland, TX 75040	31757	CEJG

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

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SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
8102801EX	1	66013-001	Optocoupler, dual channel	Yes
8102801XX	1	66072-001/883	Optocoupler, dual channel	No
8102802PX	1	66056-103	Optocoupler, dual channel	No
81028032X	1	66123-001	Optocoupler, dual channel	No
8302401EX	1	6N140/883B	Four channel optical coupler	Yes
5962-8762001XX	1	MIOP42106/883	Op amp, high power	Yes
5962-8767901EX	1	4N55/883B	Optocoupler, dual channel	Yes
5962-8767902PX	1	66126-103	Optocoupler, dual channel	No
5962-8978501PX	1	66058-003	Optocoupler, dual channel	No
5962-8978501XX	1	66071-001	Optocoupler, dual channel	No
5962-89785022X	1	66124-001	Optocoupler, dual channel	No
5962-89785032X	1	66125-001	Optocoupler, dual channel	No
5962-8981001PX	1	66058-105	Optocoupler, single channel	No
5962-9063801HXX	1	MIOP42114/883	Op amp, high power	No
5962-9065901HXX	1	MIOP42109/883	Op amp, power	Yes
5962-9067901HXX	1	MIOP42120/883	Op amp, power	Yes
5962-9072301HXX	1	MIOP42116/883	Op amp, high power	No
5962-9082801HXX	1	MIOP42115/883	Op amp, high power	No
5962-9085401HPX	1	66126-105	Optocoupler, single channel	No
5962-9167601HPX	1	66079-001	Digital opticalcoupler filter	Yes
5962-9170001HXX	1	MIOP42119/883	Op amp, high power	No

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 7

MANUFACTURER	CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Natel Engineering Co., Inc. 4550 Runway Street Simi Valley, CA 93063-3493	09059	CFEN	N/A	H
QUALIFICATION LETTER(S)			TECHNOLOGY TYPES	
EQ(EQC-91-714) EQ(EQC-92-202) EQ(EQC-92-048) EQ(EQC-93-261) EQ(EQC-92-039)			Synchro (Resolver) to Digital Converter	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>				
LOCATION: Simi Valley, CA FLOW: NHPS-01.001 CAPABILITY: Thick film on alumina, 3 conductor levels		LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>				
LOCATION: Simi Valley, CA FLOW: NHPS-01.001 CAPABILITY: polymer conductive and nonconductive epoxy, gold wire bonding		LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors, daughter board, ceramic post SUBSTRATE ATTACH: polymer nonconductive epoxy				
PACKAGE INFORMATION <u>1/ 2/ 3/</u>				
PACKAGE TYPE:	metal, with axial leads	metal, with peripheral leads		
SEAL METHOD:	seam weld	seam weld		
LEAD COUNT:	40	36		
SEAL PERIMETER:	6.56	5.34		
LEAD FINISH:	gold	gold		
PACKAGE TYPE:				
SEAL METHOD:				
LEAD COUNT:				
SEAL PERIMETER:				
LEAD FINISH:				

MANUFACTURER	CAGE CODE	SYMBOL CODE
Nate Engineering Co., Inc. 4550 Runway Street Simi Valley, CA 93063-3493	09059	CFEN

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified LOU/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-8949904XX	1	HSD1066-341H/2	11.8 V, 400 Hz, S/D converter	No
5962-8949905XX	1	HSD1066-341V/2	11.8 V, 400 Hz, S/D converter	No
5962-8949906XX	1	HSD1066-381H/2	11.8 V, 80 Hz bandwidth, S/D converter	No
5962-8990806XX	1	HRD1066-341H/2	11.8 V, 400 Hz, R/D converter	No
5962-8990807XX	1	HRD1066-381V/2	11.8 V, 400 Hz, R/D converter	No
5962-8990808XX	1	HRD1066-381H/2	11.8 V, 80 Hz bandwidth, R/D converter	No
5962-9070705HXX	1	HSD1024-C672H2	400Hz, 11.8V, synchro-to-digital conv.	No
5962-9070706HXX	1	HSD1024-C673H2	400Hz, 11.8V, synchro-to-digital conv.	No
5962-9070707HXX	1	HSD1024-C674H2	60Hz, 90V, synchro-to-digital conv.	No
5962-9070708HXX	1	HSD1024-C675H2	60Hz, 90V, synchro-to-digital conv.	No
5962-9155901HXX	1	HSDR206P-341R2	Digital-to-synchro/resolver converter	No
5962-9155902HXX	1	HSDR206P341VS2	Digital-to-synchro/resolver converter	No
5962-9155903HXX	1	HSDR206P-341H2	Digital-to-synchro/resolver converter	No
5962-9155904HXX	1	HSDR206P-341S2	Digital-to-synchro/resolver converter	No
5962-9156001HXX	1	HSD1046-341V/2	11.8 V, 400 Hz, 16-bit, S/D converter	No
5962-9156002HXX	1	HSD1046-341H/2	11.8 V, 400 Hz, 16-bit, S/D converter	No
5962-9156003HXX	1	HSD1046-341S/2	11.8 V, 400 Hz, 16-bit, S/D converter	No
5962-9161501HXX	1	HSD1510-369/2	90 V, 60 Hz, 10-bit, S/D conerter	No

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 22

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
National Hybrid, Incorporated 2200 Smithtown Avenue Ronkonkoma, NY 11779		57363	CFAQ	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-90-557) EQ(EQC-92-035)				Linear Data Converters Digital	Sample and Hold Custom Data Bus Amplifier
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Ronkonkoma, NY FLOW: FL1772A7THK CAPABILITY: thick film on alumina, 3 gold conductive layers, resistors. thick film on beryllia, 1 gold conductive layer.			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Ronkonkoma, NY FLOW: FL883500834 CAPABILITY: polymer conductive epoxy, eutectic; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip resistors, chip capacitors, chip thermistors, daughterboards SUBSTRATE ATTACH: polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with axial leads	metal, with peripheral leads			
SEAL METHOD:	seam weld	seam weld			
LEAD COUNT:	66	36			
SEAL PERIMETER:	6.32	5.34			
LEAD FINISH:	gold	gold			
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
National Hybrid, Incorporated 2200 Smithtown Avenue Ronkonkoma, NY 11779	57363	CFAQ

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-8604906YX	1	NHI-1509	Single channel digital driver-receiver	No
5962-8757905XX	1	NHI-1500	Low power, dual channel, driver-receiver	No
5962-8757905YX	1	NHI-1500FP	Low power, dual channel, driver-receiver	No
5962-8944702XX	1	NHI-1501	Dual channel, driver-receiver, rec	No
5962-8944702YX	1	NHI-1501FP	Dual channel driver-receiver, rec	No
5962-8952203XX	1	NHI-1529	Dual channel, five volt, transceiver	Yes
5962-8952203YX	1	NHI-1529FP	Dual channel, five volt, transceiver	Yes
5962-8982603XX	1	NHI-1502	Low power, dual channel, driver-receiver	No
5962-8982603YX	1	NHI-1502FP	Low power, dual channel, driver-receiver	No
5962-8982604XX	1	NHI-1523	Low power, dual channel, driver-receiver	No
5962-8982604YX	1	NHI-1523FP	Low power, dual channel, driver-receiver	No
5962-9082905YX	1	NHI-1531	Single channel, driver-receiver	No
5962-9082905TX	1	NHI-1531FP	Single channel, driver-receiver	No
5962-9082906YX	1	NHI-1545	Single channel, driver-receiver	No
5962-9082906TX	1	NHI-1545FP	Single channel, driver-receiver	No
5962-9168701HXX	1	NHI-1553RT	Bus, remote terminal	No
5962-9168701HYX	1	NHI-1553RTFP	Bus, remote terminal	No
5962-9168702HXX	1	NHI-1554RT	Bus, remote terminal	No
5962-9168702HYX	1	NHI-1554RTFP	Bus, remote terminal	No

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 2

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Omnirel Corporation 205 Crawford Street Leominster, MA 01453		69210	CESN	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-91-408) EQ(EQM-94-0029) EQ(EQC-91-807) EQ(EQC-91-838)				Voltage Regulator Power	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Leominster, MA FLOW: D070002G CAPABILITY: thick film on alumina, 2 conductor levels, resistors;thick film on beryllia, 1 conductor level, resistor			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Leominster, MA FLOW: D050015G CAPABILITY: solder, polymer nonconductive/conductive epoxy; gold and aluminum wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, tab, chip resistor, chip capacitor SUBSTRATE ATTACH: solder <u>** Maximum constant acceleration level qualified 7500g, peripheral leaded package only.</u>					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with peripheral leads	metal, with peripheral leads <u>**</u>			
SEAL METHOD:	seam weld	seam weld			
LEAD COUNT:	8	20			
SEAL PERIMETER:	2.47	8.8			
LEAD FINISH:	nickel/tin	gold			
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Omnirel Corporation 205 Crawford Street Leominster, MA 01453	69210	CESN

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-8870101YX	1	OMA541SDB	Linear, Op Amp, High Power	Yes
5962-8949001XX	1	OM7509SC/883B	Linear, Dual, Pos. and Neg. Regulator	No
5962-8949002XX	1	OM7501SC/883B	Linear, Dual, Pos. and Neg. Regulator	No
5962-8949003XX	1	OM7502SC/883B	Linear, Dual, Pos. and Neg. Regulator	No
5962-8949004XX	1	OM7503SC/883B	Linear, Dual, Pos. and Neg. Regulator	No
5962-8949005XX	1	OM7504SC/883B	Linear, Dual, Pos. and Neg. Regulator	No
5962-8949006XX	1	OM7505SC/883B	Linear, Dual, Pos. and Neg. Regulator	Yes
5962-8949007XX	1	OM7506SC/883B	Linear, Dual, Pos. and Neg. Regulator	No
5962-8949008XX	1	OM7507SC/883B	Linear, Dual, Pos. and Neg. Regulator	No
5962-8949009XX	1	OM7508SC/883B	Linear, Dual, Pos. and Neg. Regulator	No
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 13				

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Q-bit Corporation 2575 Pacific Avenue N. E. Palm Bay, FL 32905-2699		55027	(TBD)	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-93-252) EQ(EQC-93-529)				RF Amplifier	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Palm Bay, FL FLOW: QB 801805 CAPABILITY: thin film on beryllia, 1 conductor level; thin film on alumina, 1 conductor level, resistors			LOCATION: Palm Bay, FL FLOW: QB 801805 CAPABILITY: thick film on alumina, 1 conductor level, resistors		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Palm Bay, FL FLOW: QB 500011 CAPABILITY: polymer conductive/nonconductive epoxy, eutectic; gold and copper wire bonding, copper wire (solder) bonding. ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors, transformers SUBSTRATE ATTACH: polymer conductive/nonconductive epoxy, solder			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	T0 can	metal, with peripheral leads			
SEAL METHOD:	projection weld	seam weld			
LEAD COUNT:	4	16			
SEAL PERIMETER:	1.57	4.0			
LEAD FINISH:	gold	gold			
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Q-bit Corporation 2575 Pacific Avenue N. E. Palm Bay, FL 332905-2699	55027	(TBD)

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 0				

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HYBRID MICROCIRCUITS

QML-38534-17

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Raytheon Company Missile System Division 465 Centre Street Quincy, MA 02269		94144	CETX	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQM-87-1031) EQ(EQC-92-327) EQ(EQC-91-668) EQ(EQC-92-372) EQ(EQC-91-669)				Amplifier	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Quincy, MA FLOW: 38756 CAPABILITY: thick film on alumina, 8 conductor level, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Quincy, MA FLOW: 38230, 42771 CAPABILITY: polymer conductive/nonconductive epoxy and eutectic; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors, tantalum capacitors SUBSTRATE ATTACH: polymer nonconductive epoxy, solder					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with axial leads	metal, with peripheral leads			
SEAL METHOD:	seam weld	seam weld			
LEAD COUNT:	13	76			
SEAL PERIMETER:	2.76	6.36			
LEAD FINISH:	gold	gold			
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Raytheon Company Missile System Division 465 Centre Street P. O. Box 5300 Quincy, Massachusetts 02269	94144	CETX

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.
The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 4

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Sipex Corporation Hybrid System Division 22 Linnell Circle Billerica, MA 01821		33256	CFAC	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-90-506) EQ(EQC-92-052) EQ(EQC-91-781) EQ(EQC-92-438) EQ(EQC-91-813) EQ(EQC-93-524)				AD Converters Sample and Hold Amplifier	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Billerica, MA FLOW: 239-0232 CAPABILITY: thin film on alumina, 1 gold conductor layer, resistors.			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Billerica, MA FLOW: 239-0458 CAPABILITY: polymer conductive epoxy; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip resistors, chip capacitor SUBSTRATE ATTACH: polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	ceramic dual-in-line	metal, with axial leads		ceramic, leadless dual-in-line	
SEAL METHOD:	seam weld	seam weld		seam weld	
LEAD COUNT:	62	32		24	
SEAL PERIMETER:	7.476	5.78		4.17	
LEAD FINISH:	gold	gold		solder	
PACKAGE TYPE:	metal, peripheral leads				
SEAL METHOD:	seam weld				
LEAD COUNT:	64				
SEAL PERIMETER:	5.53				
LEAD FINISH:	gold				

MANUFACTURER	CAGE CODE	SYMBOL CODE
Sipex Corporation Hybrid Systems Division 22 Linneil Circle Billerica, MA 01821	33256	CFAC

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
8503001CX	1	HS2700SD/883	Precision +10.00 volt reference	Yes
8503002CX	1	HS2700UD/883	Precision +10.00 volt reference	Yes
8503003CX	1	HS2702SD/883	Precision +/- 10.00 volt reference	Yes
8503004CX	1	HS2702UD/883	Precision + 10.00 volt reference	Yes
8503005CX	1	HS2701SD/883	Precision - 10.00 volt reference	Yes
8503006CX	1	HS2701UD/883	Precision - 10.00 volt reference	Yes
5962-8851401XX	1	HS9403B-8	12-bit data aquisition system	Yes
5962-8851402XX	1	HS9403B-16	12-bit data aquisition system	Yes
5962-8877601XX	1	HS1068B	8-bit, flash, A/D converter	Yes
5962-8956501XX	1	HS362SB	12-bit data aquisition system	No
5962-8956601HCX	1	HS9716TB	16-bit sample and hold amplifier	No
5962-8971801XX	1	HS3020B	8-bit D/A converter	Yes
5962-8986201XC	1	HS9378T/S	16-bit D/A converter, (16-bit linearity)	Yes
5962-8986202XC	1	HS9378S/B	16-bit D/A converter, (15-bit linearity)	Yes
5962-8997901XX	1	SP1078B	8-bit, flash, A/D converter	Yes
5962-9079501HXX	1	HS9576S/B	16-bit A/D converter	Yes
5962-9079502HXX	1	HS9576T/B	16-bit A/D converter	Yes
5962-9063001HXX	1	SP9760B	16-bit track and hold amplifier	No
5962-9063101HXX	1	SP9588	14-bit A/D converter	No
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 79				

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Space System/Loral 3825 Fabian Way MS G41 Palo Alto, CA 94303		ODJH2	(TBD)	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQM-94-046)				Linear Microwave Digital	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Palo Alto, CA FLOW: S02FH10366 CAPABILITY: thick film on alumina, 1 conductor layer, resistors.			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Palo Alto, CA FLOW: E005245 CAPABILITY: polymer conductive/nonconductive epoxy; gold and aluminum wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitor SUBSTRATE ATTACH: polymer conductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with peripheral leads				
SEAL METHOD:	seam weld				
LEAD COUNT:	30				
SEAL PERIMETER:	5.0				
LEAD FINISH:	gold				
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Space System/Loral 3825 Fabian Way Palo Alto, CA 94303	ODJH2	(TBD)

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 0

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
TRW Manufacturing Division Hybrid Manufacturing Department One Space Park Redondo Beach, CA 90278		11982	CFHA	Not Qualified	H&K
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-92-334) EQ(EQC-93-171)				Digital Analog Custom	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Redondo Beach, CA FLOW: D16545 CAPABILITY: thin film on alumina, 1 conductor levels, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Redondo Beach, CA FLOW: D16545 CAPABILITY: polymer conductive/nonconductive epoxy and eutectic: aluminum and gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors SUBSTRATE ATTACH: eutectic <u>** Maximum constant acceleration level qualified 7500g.</u>					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with peripheral leads <u>**</u>				
SEAL METHOD:	seam seal				
LEAD COUNT:	32				
SEAL PERIMETER:	4.00				
LEAD FINISH:	gold				
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
TRW Manufacturing Division Hybrid Manufacturing Department One Space Park Redondo Beach, CA 90278	11982	CFHA

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 0

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Teledyne Microelectronics 12964 Panama Street Los Angeles, CA 90066		16170	CEOL	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQM-87-1898) EQ(EQM-94-0098) EQ(EQC-91-897) EQ(EQM-94-138) EQ(EQM-94-0085)				Data Converters Linear Microwave	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Los Angeles, CA FLOW: 7700530 Exhibit 2.5 CAPABILITY: thick film on alumina, 7 conductor levels; thick film on alumina, 1 conductor level, resistors			LOCATION: Los Angeles, CA FLOW: 7700530 Exhibit 2.4 CAPABILITY: thin film on alumina, 1 conductor levels, resistors		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Los Angeles, CA FLOW: 700530 Exhibit 2.6 CAPABILITY: polymer conductive/nonconductive epoxy, solder and eutectic; gold and aluminum wire and ribbon bonding ADD-ON ELEMENTS: unpackaged die, chip capacitors SUBSTRATE ATTACH: polymer nonconductive, solder			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with peripheral leads	metal, with axial leads			
SEAL METHOD:	seam weld	seam weld			
LEAD COUNT:	94	24			
SEAL PERIMETER:	8.75	5.00			
LEAD FINISH:	gold	gold			
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Teledyne Microelectronics 12964 Panama Street Los Angeles, California 90066	16170	CEOL

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 17				

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Texas Instruments DSEG/Microelectronics Department 13532 North Central Expressway Dallas, TX 75243		96214	CFCA	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-91-031) EQ(EQC-92-392)				Linear	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Dallas, Texas FLOW: AII-HYB-005 CAPABILITY: thick film on alumina, 5 conductor levels, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Dallas, Texas FLOW: AII-HYB-005 CAPABILITY: polymer conductive/nonconductive epoxy; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors SUBSTRATE ATTACH: polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with axial leads				
SEAL METHOD:	seam weld				
LEAD COUNT:	64				
SEAL PERIMETER:	7.88				
LEAD FINISH:	gold				
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Texas Instruments Inc DSEG/Microelectronics Department 13532 North Central Expressway Dallas, TX 75243	96214	CFCA

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 0				

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
Westinghouse Electric Company 7323 Aviation Boulevard Baltimore, MD 21203		97942	CFAR	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-90-567) EQ(EQC-91-629)				Custom Power Digital Analog	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Baltimore, MD FLOW: 1L88-2461-1/MT CAPABILITY: thick film on alumina, 8 conductor levels			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Baltimore, MD FLOW: 1L88-2461-5/DM CAPABILITY: polymer conductive/nonconductive epoxy, eutectic; gold and aluminum wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors, spacer post, tab SUBSTRATE ATTACH: polymer nonconductive epoxy, solder					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	metal, with peripheral leads	power, metal, peripheral leads			
SEAL METHOD:	seam weld	seam weld			
LEAD COUNT:	68	12			
SEAL PERIMETER:	5.92	6.0			
LEAD FINISH:	gold	gold			
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
Westinghouse Electric Corporation 7323 Aviation Boulevard Baltimore, MD 21203	97942	CFAR

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
None	N/A	N/A	N/A	N/A
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 3				

MANUFACTURER		CAGE CODE	SYMBOL CODE	RADIATION HARDNESS LEVEL	PRODUCT CLASS DESIGNATOR
White Technology 4246 East Wood Street Phoenix, AZ 85040		54230	CEWR	N/A	H
QUALIFICATION LETTER(S)				TECHNOLOGY TYPES	
EQ(EQC-92-070) EQ(EQC-93-508) EQ(EQC-92-138) EQC-93-457				Linear (Oscillator) Digital Memory	
SUBSTRATE FABRICATION OPERATION (S) <u>1/</u>					
LOCATION: Phoenix, AZ FLOW: 106A00006 CAPABILITY: thick film on alumina, 1 conductor levels, resistors			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ASSEMBLY OPERATION(S) <u>1/</u>					
LOCATION: Phoenix, AZ FLOW: 106A00006 CAPABILITY: polymer conductive/nonconductive epoxy; gold wire bonding			LOCATION: N/A FLOW: N/A CAPABILITY: N/A		
ADD-ON ELEMENTS: unpackaged die, chip resistors, chip capacitors SUBSTRATE ATTACH: polymer nonconductive epoxy					
PACKAGE INFORMATION <u>1/ 2/ 3/</u>					
PACKAGE TYPE:	platform	ceramic co-fire, side braze leads			
SEAL METHOD:	projection weld	seam weld			
LEAD COUNT:	16	32			
SEAL PERIMETER:	3.53	4.27 (dual cavity)			
LEAD FINISH:	gold	gold			
PACKAGE TYPE:					
SEAL METHOD:					
LEAD COUNT:					
SEAL PERIMETER:					
LEAD FINISH:					

MANUFACTURER	CAGE CODE	SYMBOL CODE
White Technology 4246 East Wood Street Phoenix, Arizona 85040	54230	CEWR

PRODUCT ELIGIBILITY: The above manufacturer has certified that the following listing of hybrid microcircuits are built, tested, and shipped using the above certified FLOW/ QUALIFIED MATERIALS AND MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

The listing does not in anyway represent or imply interchangeability, equivalency.

SPECIFIC PRODUCT TYPES

STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER <u>4</u> /	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-9207801HXC	1	WS-512K8-120CQ	SRAM, 512K x 8 bit, 120ns	Yes
5962-9207802HXC	1	WS-512K8-100CQ	SRAM, 512K x 8 bit, 100ns	No
5962-9207803HXC	1	WS-512K8-85CQ	SRAM, 512K x 8 bit, 85ns	No
5962-9207804HXC	1	WS-512K8-70CQ	SRAM, 512K x 8 bit, 70ns	No
5962-9207805HXC	1	WS-512K8-55CQ	SRAM, 512K x 8 bit, 55ns	No
5962-9207806HXC	1	WS-512K8-45CQ	SRAM, 512K x 8 bit, 45ns	No
5962-9207807HXC	1	WS-512K8-35CQ	SRAM, 512K x 8 bit, 35ns	No
5962-9207808HXC	1	WS-512K8-23CQ	SRAM, 512K x 8 bit, 25ns	Yes
5962-9309101HXC	1	WE-512K8-150CQ	EEPROM, 512K x 8 bit, 150ns	Yes
5962-9309102HXC	1	WE-512K8-300CQ	EEPROM, 512K x 8 bit, 300ns	No
5962-9309103HXC	1	WE-512K8-250CQ	EEPROM, 512K x 8 bit, 250ns	No
5962-9309104HXC	1	WE-512K8-200CQ	EEPROM, 512K x 8 bit, 200ns	Yes
5962-9315401HXC	1	WE-128K8-200CQ	EEPROM, 128K x 8 bit, 200ns	No
5962-9315402HXC	1	WE-128K8-150CQ	EEPROM, 128K x 8 bit, 150ns	No
5962-9315501HXC	1	WE-256K8-200CQ	EEPROM, 256K x 8 bit, 200ns	Yes
5962-9315502HXC	1	WE-256K8-150CQ	EEPROM, 256K x 8 bit, 150ns	No
5962-9315601HXC	1	WS-128K8-120CQ	SRAM, 128K x 8 bit, 120ns	No
5962-9315602HXC	1	WS-128K8-100CQ	SRAM, 128K x 8 bit, 120ns	No
5962-9315603HXC	1	WS-128K8-85CQ	SRAM, 128K x 8 bit, 85ns	No
5962-9315604HXC	1	WS-128K8-70CQ	SRAM, 128K x 8 bit, 70ns	No
5962-9315605HXC	1	WS-128K8-55CQ	SRAM, 128K x 8 bit, 55ns	No
5962-9315606HXC	1	WS-128K8-45CQ	SRAM, 128K x 8 bit, 45ns	No
5962-9315607HXC	1	WS-128K8-35CQ	SRAM, 128K x 8 bit, 35ns	No
5962-9315608HXC	1	WS-128K8-25CQ	SRAM, 128K x 8 bit, 25ns	No
5962-9315701HXC	1	WS-256K8-120CQ	SRAM, 256K x 8 bit, 120ns	No
5962-9315702HXC	1	WS-256K8-100CQ	SRAM, 256K x 8 bit, 100ns	No
5962-9315703HXC	1	WS-256K8-85CQ	SRAM, 256K x 8 bit, 85ns	No
5962-9315704HXC	1	WS-256K8-70CQ	SRAM, 256K x 8 bit, 70ns	Yes
5962-9315705HXC	1	WS-256K8-55CQ	SRAM, 256K x 8 bit, 55ns	No
5962-9315706HXC	1	WS-256K8-45CQ	SRAM, 256K x 8 bit, 45ns	No
5962-9315707HXC	1	WS-256K8-35CQ	SRAM, 256K x 8 bit, 35ns	No
5962-9315708HXC	1	WS-256K8-25CQ	SRAM, 256K x 8 bit, 25ns	No

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 3

PRODUCT TYPE/DESCRIPTIONS

Listed below are individual descriptions for Hybrid Microcircuit Standardized Military Drawings (SMDs). Indicted below each SMD and its description are device type numbers and corresponding descriptions for the device types. If no description is given for a particular device type, either the description is included in the SMD description or only minor differences exist between device types.

SMD/ DEVICE TYPE	DESCRIPTION
(5915-)91020	Filter, EMI, 4 amp
01	
78013	Amplifier, High Current, Thick/Thin Film
01	
80013	Amplifier, Operational, Thick Film
01	
80014	Amplifier, Buffer/Voltage Follower, Thick Film with FET input
01	
81028	Optocoupler, Dual Channel
01	common bias connections
02	common bias connections
03	separate bias connections
83002	Digital-to-Analog Converter, 12-bit, programmable voltage output
01	0/5, 0/10, -2.5/2.5, -5/5, -10/10
83024	Optocoupler, quad channel
01	
85030	Reference, Precision Voltage, Thin Film
01	+10.000V
02	+10.000V
03	+/-10.000V
04	+/-10.000V
05	-10.000V
06	-10.000V
85087	Amplifier, Power Operational, Externally compensated, thick film
01	0.2A output
85088	Amplifier, Power Operational, Externally compensated, thick film
01	1A output
85089	Amplifier, Wideband Power Operational, thick film
01	
02	
5962-86049	Driver-Receiver, Single Channel
01	interfaces w/ Manchester encoder/decoder
02	low power, intrfcs w/ Manchester enc/dec
03	interfaces w/ Manchester encoder/decoder
04	low power, intrfcs w/ Manchester enc/dec
05	interfaces w/ Manchester encoder/decoder
06	interfaces w/ Manchester encoder/decoder
07	interfaces w/ Manchester encoder/decoder
08	
5962-87535	Remote Terminal Unit, Dual Redundant
01	
02	
5962-87579	Driver-Receiver, Dual Channel, 15 V
01	

PRODUCT TYPE/DESCRIPTIONS

SMD/ DEVICE TYPE	DESCRIPTION
5962-87579	Driver-Receiver, Dual Channel, 15 V
02	low power
03	
04	low power
05	low power
06	low power, thermal protection
07	low power
08	low power
09	low power
5962-87617	Driver, High Voltage
01	1.5A
02	3.0A
5962-87620	Amplifier, Power Operational
01	
02	
5962-87632	Remote Terminal Unit, Dual Redundant, Low Power
01	
5962-87679	Optocoupler, Dual Channel
01	separate bias connections
02	common bias connections
03	separate bias connections
5962-87687	Resolver/Synchro-to-Digital Converter, 400 Hz
01	+/-2.6 arc min accuracy +/-1.0 LSB
02	+/-4.0 arc min accuracy +/-1.0 LSB
03	+/-2.6 arc min accuracy +/-1.0 LSB, 6V in
5962-87688	Digital-to-Analog Converter, 8-bit
01	0 to 4V output
02	-2 to +2V output
5962-88508	Analog-to-digital Converter, 12-bit
01	20 microsecond conversion
02	8 microsecond conversion
5962-88509	Digital-to-Analog Converter, 12-bit, quad channel
01	bipolar
02	bipolar
5962-88510	Digital-to-Analog Converter, 12-bit, quad channel
01	bipolar
02	bipolar
03	unipolar
04	unipolar
5962-88514	Data Acquisition System, 12-bit
01	8-channel differential input
02	16-channel single-ended input
03	8-channel differential input
04	16-channel single-ended input
5962-88517	Digital-to-Analog Converter, 14-bit, deglitched
01	+/-0.012% FSR linearity error
02	+/-0.006% FSR linearity error
5962-88542	Analog-to-digital Converter, 12-bit track/hold
01	
5962-88579	Amplifier, Video Operational, Fast Settling
01	VIO=+/-15 mV at 25 C
02	VIO=+/-1.5 mV at 25 C

PRODUCT TYPE/DESCRIPTIONS

SMD/ DEVICE TYPE	DESCRIPTION
5962-88585 01	MIL-STD-1553, BUS controller, RTU, and monitor unit
5962-88586 01	MIL-STD-1553, BUS to microprocessor interface unit
5962-88629 01	Digital-to-Analog Converter, 12-bit, quad channel
5962-88658 01	Analog-to-Digital Converter, 12-bit, high speed
02	
03	
04	
5962-88692 01	MIL-STD-1553 BC/RTU/MT Multiplexed terminal
02	w/ transceiver
03	w/ transceiver
04	transceiverless
5962-88701 01	Amplifier, Power Operational, High Current
5962-88768 01	Optocoupler, Single Channel, High Speed
5962-88769 01	Optocoupler, Dual Channel, High Speed
02	common bias connections
02	separate bias connections
5962-88776 01	Analog-to-Digital Converter, 8-bit, flash
5962-89447 01	Driver-Receiver, Dual Channel, Receiver Idle Normally High
02	Turns ratio, XFMR: 1.4:1, Dir: 2:1
03	Turns ratio, XFMR: 1.4:1, Dir: 2:1
04	Turns Ratio, XFMR: 2:1, Dir: 2:1
5962-89477 01	Optocoupler, AC/DC to logic interface
5962-89490 01	Voltage Regulator, Dual, Fixed
02	+/-15 V output
03	+/-5 V output
04	+5, -12 V output
05	+5, -15 V output
06	+12, -5 V output
07	+/-12 V output
08	+12, -15 V output
09	+15, -5 V output
09	+15, -12 V output
5962-89498 01	Synchro-to-Digital Converter, 90 V, 400 Hz
02	2 minutes +/-1 LSB accuracy
03	1 minute +/-1 LSB accuracy
04	2 minutes +/-1 LSB accuracy
05	1 minute +/-1 LSB accuracy
05	2 minutes +/-1 LSB accuracy
5962-89499 01	Synchro-to-Digital Converter, 11.8 V, 400 Hz
02	2 minutes +/-1 LSB accuracy
03	1 minute +/-1 LSB accuracy
03	2 minutes +/-1 LSB accuracy, 80 Hz BW

PRODUCT TYPE/DESCRIPTIONS

SMD/ DEVICE TYPE	DESCRIPTION
5962-89499	Synchro-to-Digital Converter, 11.8 V, 400 Hz
04	2 minutes +/-1 LSB accuracy
05	1 minute +/-1 LSB accuracy
06	2 minutes +/-1 LSB accuracy, 80 Hz BW
5962-89509	Digital-to-Analog Converter, Triple, 8-bit, Video RAM
01	
5962-89522	MIL-STD-1553 Driver-Receiver, Dual Channel, 5 V
01	Turns ratio, XFMR: 4:7, Dir: 2:5
02	Turns ratio, XFMR: 1:1.5, Dir: 1:2.12
03	Turns ratio, XFMR: 1:1.5, Dir: 1:2.12
04	Turns ratio, XFMR: 4:7, Dir: 2:5
05	Turns ratio, XFMR: 1:1.5, Dir: 1:2.12
06	Turns ratio, XFMR: 1:1.5, Dir: 1:2.12
07	Turns ratio, XFMR: 4:7, Dir: 2:5
08	Turns ratio, XFMR: 1:1.5, Dir: 1:2.12
5962-89528	Digital-to-Analog Converter, 12-bit
01	binary input code
02	two's complement
5962-89531	Digital-to-Analog Converter, 16-bit
01	0-10, +/-5 V output
02	+/-10 V output
03	0-10 V output
04	+/-5 V output
5962-89563	Analog-to-Digital Converter, 16-bit
01	14-bit short cycle
02	13-bit short cycle
5962-89565	Data Acquisition System, 12-bit, dual 8-channel MUX Sample/Hold
01	8 differential or 16 single-ended inputs
5962-89566	Amplifier, Sample/Hold, High Accuracy
01	16-bit
5962-89569	Analog-to-Digital Converter, 16-bit, High Speed
01	
5962-89570	Optocoupler, Single Channel, High Speed
01	
5962-89571	Optocoupler, Dual Channel, High Speed
01	common bias connections
02	separate bias connections
5962-89572	Optocoupler, Dual Channel, Line Receiver
01	
5962-89583	Analog-to-Digital Converter, 12-bit
01	0/-10V internal reference
02	0/-10V external reference
03	-5/5V internal reference
04	-5/5V external reference
05	-10/10V internal reference
06	-10/10V external reference
07	0/10V internal reference
5962-89584	Analog-to-Digital Converter, 12-bit, High Speed
01	0/-10V internal reference
02	0/-10V external reference
03	-5/5V internal reference
04	-5/5V external reference

PRODUCT TYPE/DESCRIPTIONS

SMD/ DEVICE TYPE	DESCRIPTION
5962-89584	Analog-to-Digital Converter, 12-bit, High Speed
05	-10/10V internal reference
06	-10/10V external reference
07	0/10V internal reference
5962-89592	Driver-Receiver, Single Channel, Low Power
01	MIL-STD-1553A & B, receiver standby high
02	universal trans., receiver standby high
03	MIL-STD-1553A & B, receiver standby high
04	universal trans., receiver standby high
05	MIL-STD-1553A & B, receiver standby low
06	universal trans., receiver standby low
5962-89594	Amplifier, Wideband Operational, High Speed
01	
5962-89595	Analog-to-Digital Converter, 12-bit
01	0 to 5 V
02	0 to 5 V, 3-state outputs
03	+/-2.5 V
04	+/-2.5 V, 3-state outputs
5962-89659	Amplifier, FET Buffer
01	
5962-89683	DC/DC Converter, Single Channel, 15 W, 5 V Output
01	
02	
03	
5962-89718	Digital-to-Analog Converter, 8-bit, with input register
01	
5962-89785	Optocoupler, Dual Channel, High Gain
01	common bias connections
02	separate bias connections
03	
5962-89798	Remote Terminal Unit, Dual Redundant
01	
02	
5962-89799	Driver/Receiver, Single Channel, low power
01	0.67 xfmr, 0.47 direct ratio, Harris int
02	0.67 xfmr, 0.47 direct ratio, Smith int
5962-89810	Optocoupler, Single Channel, High Gain, Low Input Current
01	
5962-89813	Amplifier, Wideband Operational, Fast Settling
01	
5962-89826	Driver-Receiver, Dual Channel, Low Power, 12 V
01	4:7 xfmr, 2:5 dir. xfmr turns ratio
02	1:0.707 xfmr, 1:1 dir. xfmr turns ratio
03	1:0.7 xfmr, 1:1 dir. xfmr turns ratio
04	1:0.57 xfmr, 1:0.8 dir. xfmr turns ratio
05	1:1.66 xfmr, 1:1.2 dir. xfmr turns ratio
06	1:0.707 xfmr, 1:1 dir. xfmr turns ratio
5962-89858	Amplifier, Wideband Operational, overdrive protected
01	
5962-89862	Digital-to-Analog Converter, 16-bit, microprocessor compatible
01	16-bit linearity
02	15-bit linearity

PRODUCT TYPE/DESCRIPTIONS

SMD/ DEVICE TYPE	DESCRIPTION
5962-89908	Resolver-to-Digital Converter, 11.8 V, 400 Hz
01	2.0 min. accuracy +/-1.0 LSB
02	1.0 min. accuracy +/-1.0 LSB
03	2.0 min. accuracy +/-1.0 LSB, 80 Hz BW
04	1.0 min. accuracy +/-1.0 LSB, trim veloc
05	2.0 min. accuracy +/-1.0 LSB, 80 Hz BW
06	2.0 min. accuracy +/-1.0 LSB
07	1.0 min. accuracy +/-1.0 LSB
08	2.0 min. accuracy +/-1.0 LSB, 80 Hz BW
5962-89910	Amplifier, Wideband Operational, High Speed
01	
5962-89911	Amplifier, Wideband Operational, High Speed
01	
5962-89940	Amplifier, Sample and Hold, High Speed
01	
02	
5962-89979	Analog-to-Digital Converter, 8-bit, flash
01	
5962-89986	Digital-to-Synchro/Resolver Converter, 16-bit
01	+/- 8 minutes accuracy
02	+/- 4 minutes accuracy
03	+/- 2 minutes accuracy
04	+/- 1 minute accuracy
5962-90551	Resolver-to-Digital Converter, 1 V, 400 Hz
01	6.0 min. accuracy +/-1.0 LSB
02	4.0 min. accuracy +/-1.0 LSB
03	2.0 min. accuracy +/-1.0 LSB
04	1.0 min. accuracy +/-1.0 LSB
05	6.0 min. accuracy +/-1.0 LSB, trim veloc
06	4.0 min. accuracy +/-1.0 LSB, trim veloc
07	2.0 min. accuracy +/-1.0 LSB, trim veloc
08	1.0 min. accuracy +/-1.0 LSB, trim veloc
5962-90554	Resolver/Synchro-to-Digital Converter, 400 Hz, buffer input
01	+/-2.6 arc min. accuracy +/-1.0 LSB
02	+/-4.0 arc min. accuracy +/-1.0 LSB
5962-90570	Digital-to-Analog Converter, 12-bit, input register
01	
5962-90571	Amplifier, Track and Hold, Multiplexed
01	
5962-90630	Amplifier, Track and hold, 16-bit
01	
5962-90631	Analog-to-Digital Converter, 14-bit
01	
5962-90634	Digital-to-Analog Converter, 12-bit
01	
5962-90636	MIL-STD-1553 Data Terminal Bit Processor
01	
02	with high data bus driver capability
03	
04	
5962-90638	Amplifier, Power Operational
01	

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HYBRID MICROCIRCUITS

QML-38534-17

PRODUCT TYPE/DESCRIPTIONS

SMD/ DEVICE TYPE	DESCRIPTION
5962-90659 01	Amplifier, Power Operational
5962-90666 01	Analog-to-Digital Converter, 12-bit
5962-90679 01	Amplifier, Power Operational
5962-90707 01	Synchro-to-Digital Converter
02	400 Hz, 11.8V, 2.6 arc min acc +/-1 LSB
03	400 Hz, 11.8V, 4.0 arc min acc +/-1 LSB
04	60 Hz, 90 V, +/-2.6 arc min acc +/-1 LSB
05	60 Hz, 90 V, +/-4.0 arc min acc +/-1 LSB
06	400 Hz, 11.8V, 2.6 arc min acc +/-1 LSB
07	400 Hz, 11.8V, 4.0 arc min acc +/-1 LSB
08	60 Hz, 90 V, +/-2.6 arc min acc +/-1 LSB
5962-90723 01	60 Hz, 90 V, +/-4.0 arc min acc +/-1 LSB
5962-90730 01	Amplifier, Power Operational
5962-90736 01	Amplifier, Track and hold, High Speed
5962-90795 01	Amplifier, High Voltage Operational
02	Amplifier, High Voltage Operational
5962-90797 01	Analog-to-Digital Converter, 16-bit, High Speed
02	+/-0.006 % FSR max linearity error
5962-90797 01	+/-0.003 % FSR max linearity error
5962-90820 01	Data Acquisition System, 12-bit, Eight Channel
02	Data Acquisition System, 12-bit, Eight Channel
5962-90828 01	Synchro/Resolver-to-Digital Converter, 11.8 V, 400 Hz
02	+/-1.3 arc minutes accuracy
5962-90828 01	+/-1.3 arc minutes accuracy
5962-90829 01	Amplifier, Power Operational
02	Amplifier, Power Operational
5962-90833 01	Driver-Receiver, MIL-STD-1553, Single Channel, 12 V
02	rcvr idle low, 1.66/1.2 xfmr/dir ratios
03	rcvr idle high, 1.66/1.2 xfmr/dir ratios
04	rcvr idle low, 1.41/1 xfmr/dir ratios
05	rcvr idle high, 1.41/1 xfmr/dir ratios
06	rcvr idle low, 1.77/1.25 xfmr/dir ratios
07	rcvr idle high, 1.77/1.25 xfmr/dir ratios
08	rcvr idle low, 1.2/1 xfmr/dir ratios
5962-90833 01	rcvr idle high, 1.2/1 xfmr/dir ratios
5962-90835 01	Amplifier, Wideband Operational, high speed
5962-90836 01	Amplifier, Wideband Operational, overdrive protected
5962-90854 01	Amplifier, Wideband Operational, high speed
5962-90855 01	Optocoupler, Single Channel, Transistor Output
5962-90902 01	Optocoupler, Single Channel, High Speed
5962-90902 01	Amplifier, Closed loop buffer, FET input
5962-90902 01	+/-12 V supply voltage

PRODUCT TYPE/DESCRIPTIONS

SMD/ DEVICE TYPE	DESCRIPTION
5962-90902 02	Amplifier, Closed loop buffer, FET input +/-15 V supply voltage
5962-90954 01	DC/DC Converter, Triple Channel, 15 W +5, +/-15 V output
5962-90977 01	Amplifier, Wideband Operational, Low distortion
5962-90995 01	Analog-to-Digital Converter, 12-bit
5962-91559 01	Digital-to-Synchro/Resolver Converter, 16-bit, uP compatible +/-1 res, +/-2 syn arc min accuracy
02	+/-1 syn, +/-2 res arc min accuracy
03	+/-2 res/syn mode arc min accuracy
04	+/-4 res/syn mode arc min accuracy
5962-91560 01	Synchro-to-Digital Converter, 11.8 V, Microprocessor compatible 400 Hz, 16-bit, +/-1.3 arc min accuracy
02	400 Hz, 16-bit, +/-2.6 arc min accuracy
03	400 Hz, 16-bit, +/-5.2 arc min accuracy
5962-91574 01	Amplifier, Differential, Operational, FET input
5962-91575 01	DC/DC Converter, Dual Channel, 15 W +/-15 V output
02	+/-15 V output
03	+/-15 V output
5962-91579 01	DC/DC Converter, Single Channel, 30 W, 5 V output
02	
03	
5962-91580 01	DC/DC Converter, Single Channel, 12 V, 20 W
02	
03	
5962-91600 01	DC/DC Converter, Single Channel, 12 W, 5 V Output
5962-91601 01	DC/DC Converter, Single Channel, 15 V, 15 W output
5962-91602 01	DC/DC Converter, Triple Channel, 15 W +5, +/-12 V output
5962-91613 01	DC/DC Converter, Dual Channel, 30 W +/-15 V output
02	+/-15 V output
03	+/-15 V output
5962-91614 01	DC/DC Converter, Dual Channel, 15 W, +/-15 V output
5962-91615 01	Synchro-to-Digital Converter, 90 V, 60 Hz, 10-bit +/- 21 arc min accuracy
5962-91621 01	Amplifier, Power Operational
5962-91625 01	DC/DC Converter, Single Channel, 15 V, 20 W output
02	
03	

PRODUCT TYPE/DESCRIPTIONS

SMD/ DEVICE TYPE	DESCRIPTION
5962-91664 01	DC/DC Converter, Single Channel, 12 V, 15 W output
5962-91665 01	Amplifier, Wideband Operational, low distortion
5962-91676 01	Optocoupler, Single Channel
5962-91687 01	MIL-STD-1553, MUX, BUS Remote Terminal Unit
02	Terminal # 46: +5 V Ram Sup
02	Terminal # 46: SSF-TF
5962-91700 01	Amplifier, Power Operational
5962-91712 01	Analog-to-Digital Converter, 16-bit, sampling, 500 kHz
5962-91734 01	MIL-STD-1553 BC/RTU/MT multiplexed terminal
02	with transceiver
03	with transceiver
04	with transceiver
5962-91736 01	Synchro/Resolver-to-Digital Converter, 11.8 V, 400 Hz
02	S/D, 14-bit, 4 min accrcy +/-1 LSB, VEL
03	S/D, 14-bit, 4 min accrcy +/-1 LSB, BIT
04	R/D, 14-bit, 4 min accrcy +/-1 LSB, VEL
05	R/D, 14-bit, 4 min accrcy +/-1 LSB, BIT
06	S/D, 16-bit, 4 min accrcy +/-1 LSB, VEL
07	S/D, 16-bit, 4 min accrcy +/-1 LSB, BIT
08	R/D, 16-bit, 4 min accrcy +/-1 LSB, VEL
09	R/D, 16-bit, 4 min accrcy +/-1 LSB, BIT
10	S/D, 16-bit, 2 min accrcy +/-1 LSB, VEL
11	S/D, 16-bit, 2 min accrcy +/-1 LSB, BIT
12	R/D, 16-bit, 2 min accrcy +/-1 LSB, VEL
12	R/D, 16-bit, 2 min accrcy +/-1 LSB, BIT
5962-91749 01	Driver-Receiver, Single Channel, Low Power, receiver idle high
02	MIL-STD-1553 A and B
03	universal transceiver
04	universal transceiver
05	MIL-STD-1553 A and B
06	MIL-STD-1553 A and B
07	universal transceiver
08	universal transceiver
09	MIL-STD-1553 A and B
09	universal transceiver
5962-91770 01	Analog-to-Digital Converter, 16-bit, sampling
5962-91773 01	DC/DC Converter, 15W, 5V
5962-92040 01	DC/DC Converter, Dual Channel, 15 W output
02	+/-12 V output
03	+/-12 V output
03	+/-12 V output
5962-92048 01	Synchro/Resolver-to-Digital Converter, 11.8V, 400 Hz
02	S/D, 14-bit, 4 min accrcy +/-1 LSB
02	R/D, 14-bit, 4 min accrcy +/-1 LSB

PRODUCT TYPE/DESCRIPTIONS

SMD/ DEVICE TYPE	DESCRIPTION
5962-92048	Synchro/Resolver-to-Digital Converter, 11.8V, 400 Hz
03	S/D, 14/16-bit, 4 min accrcy +/-1 LSB
04	R/D, 14/16-bit, 4 min accrcy +/-1 LSB
05	S/D, 14/16-bit, 2 min accrcy +/-1 LSB
06	R/D, 14/16-bit, 2 min accrcy +/-1 LSB
5962-92049	Synchro/Resolver-to-Digital Converter, 90V
01	S/D, 14-bit, 400 Hz, 4 min acc +/-1 LSB
02	S/D, 14-bit, 60 Hz, 4 min acc +/-1 LSB
03	S/D, 14/16-bit, 400Hz, 4 min acc +/-1LSB
04	S/D, 14/16-bit, 60 Hz, 4 min acc +/-1LSB
05	S/D, 14/16-bit, 400Hz, 2 min acc +/-1LSB
06	S/D, 14/16-bit, 60 Hz, 2 min acc +/-1LSB
5962-92050	Resolver-to-Digital Converter, 2V, 400 Hz
01	14-bit, 4 min accuracy +/-1 LSB
02	14/16-bit, 4 min accuracy +/-1 LSB
03	14/16-bit, 2 min accuracy +/-1 LSB
5962-92051	Synchro/Resolver-to-Digital Converter, 90 V
01	14-bit, 400 Hz, 4 min acc +/-1 LSB, VEL
02	14-bit, 400 Hz, 4 min acc +/-1 LSB, BIT
03	14-bit, 60 Hz, 4 min acc +/-1 LSB, VEL
04	14-bit, 60 Hz, 4 min acc +/-1 LSB, BIT
05	16-bit, 400 Hz, 4 min acc +/-1 LSB, VEL
06	16-bit, 400 Hz, 4 min acc +/-1 LSB, BIT
07	16-bit, 60 Hz, 4 min acc +/-1 LSB, VEL
08	16-bit, 60 Hz, 4 min acc +/-1 LSB, BIT
09	16-bit, 400 Hz, 2 min acc +/-1 LSB, VEL
10	16-bit, 400 Hz, 2 min acc +/-1 LSB, BIT
11	16-bit, 60 Hz, 2 min acc +/-1 LSB, VEL
12	16-bit, 60 Hz, 2 min acc +/-1 LSB, BIT
5962-92052	Resolver-to-Digital Converter, 2 V, 400 Hz
01	14-bit, 4 min accuracy +/-1 LSB, VEL
02	14-bit, 4 min accuracy +/-1 LSB, BIT
03	16-bit, 4 min accuracy +/-1 LSB, VEL
04	16-bit, 4 min accuracy +/-1 LSB, BIT
05	16-bit, 2 min accuracy +/-1 LSB, VEL
06	16-bit, 2 min accuracy +/-1 LSB, BIT
5962-92053	Synchro/Resolver-to-Digital Converter, 11.8 V, 400 Hz
01	S/D, 14-bit, 4 min acc +/-1 LSB, VEL
02	S/D, 14-bit, 4 min acc +/-1 LSB, BIT
03	R/D, 14-bit, 4 min acc +/-1 LSB, VEL
04	R/D, 14-bit, 4 min acc +/-1 LSB, BIT
05	S/D, 16-bit, 4 min acc +/-1 LSB, VEL
06	S/D, 16-bit, 4 min acc +/-1 LSB, BIT
07	R/D, 16-bit, 4 min acc +/-1 LSB, VEL
08	R/D, 16-bit, 4 min acc +/-1 LSB, BIT
09	S/D, 16-bit, 2 min acc +/-1 LSB, VEL
10	S/D, 16-bit, 2 min acc +/-1 LSB, BIT
11	R/D, 16-bit, 2 min acc +/-1 LSB, VEL
12	R/D, 16-bit, 2 min acc +/-1 LSB, BIT
5962-92054	Synchro-to-Digital Converter, 90 V
01	14-bit, 400 Hz, 4 min acc +/-1 LSB, VEL
02	14-bit, 400 Hz, 4 min acc +/-1 LSB, BIT

PRODUCT TYPE/DESCRIPTIONS

SMD/ DEVICE TYPE	DESCRIPTION
5962-92054	Synchro-to-Digital Converter, 90 V
03	14-bit, 60 Hz, 4 min acc +/-1 LSB, VEL
04	14-bit, 60 Hz, 4 min acc +/-1 LSB, BIT
05	16-bit, 400 Hz, 4 min acc +/-1 LSB, VEL
06	16-bit, 400 Hz, 4 min acc +/-1 LSB, BIT
07	16-bit, 60 Hz, 4 min acc +/-1 LSB, VEL
08	16-bit, 60 Hz, 4 min acc +/-1 LSB, BIT
09	16-bit, 400 Hz, 2 min acc +/-1 LSB, VEL
10	16-bit, 400 Hz, 2 min acc +/-1 LSB, BIT
11	16-bit, 60 Hz, 2 min acc +/-1 LSB, VEL
12	16-bit, 60 Hz, 2 min acc +/-1 LSB, BIT
5962-92055	Resolver-to-Digital Converter, 2 V, 400 Hz
01	14-bit, 4 min accuracy +/-1 LSB, VEL
02	14-bit, 4 min accuracy +/-1 LSB, BIT
03	16-bit, 4 min accuracy +/-1 LSB, VEL
04	16-bit, 4 min accuracy +/-1 LSB, BIT
05	16-bit, 2 min accuracy +/-1 LSB, VEL
06	16-bit, 2 min accuracy +/-1 LSB, BIT
5962-92058	Driver-Receiver, Single Channel, Low Power, receiver idle low
5962-92061	MIL-STD-1553 Driver-Receiver, Dual Channel, 5 V
01	MIL-STD-1553 xcvr, Harris interface
02	MIL-STD-1553 xcvr, Smith interface
03	MIL-STD-1553 xcvr, standby low
04	MIL-STD-1553 xcvr, standby high
05	MacAir xcvr, standby low
06	MacAir xcvr, standby high
5962-92073	Analog-to-Digital Converter, 8-bit
01	1.5 microsecond
02	900 nanosecond
5962-92078	Memory, CMOS Static RAM, 512k x 8-bit
01	120 ns access time
02	100 ns access time
03	85 ns access time
04	70 ns access time
05	55 ns access time
06	45 ns access time
07	35 ns access time
08	25 ns access time
5962-92085	Driver-Receiver, Single Channel, Low Power, receiver idle low
01	universal transceiver
02	universal transceiver
03	universal transceiver
04	universal transceiver
5962-92109	DC/DC Converter, Dual Channel, 30 W output
01	+/-12 V output
02	+/-12 V output
03	+/-12 V output
5962-92111	DC/DC Converter, +12V, -12V, 12W
01	
5962-92115	DC/DC Converter, Triple Channel, 15 W, +5 and +/-12 V output
01	

PRODUCT TYPE/DESCRIPTIONS

SMD/ DEVICE TYPE	DESCRIPTION
5962-92116 01	DC/DC Converter, Triple Channel, 15 W, +5 and +/-15 V output
5962-92138 01	Synchro/Resolver-to-Digital Converter, 11.8V, 400 Hz, 16-bit
02	+/-1.3,+/-2.6 acc res/syn
03	+/-1.3,+/-2.6 acc res/syn
04	+/-2.6 arcmin acc both modes
04	+/-5.2 arcmin acc both modes
5962-92139 01	DC/DC Converter, Single Channel, 5 V, 12 W output
5962-92144 01	DC/DC Converter, Dual Channel, 15 W, +/-12 V output
5962-92159 01	DC/DC Converter, 30W, triple channel
01	+5, +/-15V output
5962-92162 01	Bus Interface Unit, Dual Red., small terminal interface circuit
02	-15 V
02	-12 V
5962-92253 01	Analog-to-Digital Converter, 16-bit, sampling
5962-92304 01	MIL-STD-1553 MUX, BUS Remote Terminal Unit
5962-92351 01	DC/DC Converter, Dual Channel, 12 W, +/-15 V output
5962-93065 01	BC/RTU Multiplexed Terminal, MIL-STD-1553, 4K RAM
02	+5/-15V transceiver
02	+5/-12V transceiver
03	+5/-15V BC/MT transceiver
04	+5/-12V BC/MT transceiver
05	+5/-15V transceiver w/ RT address latch
06	+5/-12V transceiver w/ RT address latch
07	+5/-15V BC/MT xcvr w/ RT address latch
08	+5/-12V BC/MT xcvr w/ RT address latch
5962-93089 01	DC/DC Converter, 5W, +/-12V
5962-93090 01	DC/DC Converter, 5W, +/-15V
5962-93091 01	Memory, EEPROM, 512k x 8-bit
02	150 ns access time
02	300 ns access time
03	250 ns access time
04	200 ns access time
5962-93092 01	DC/DC Converter, 5W, +5V
5962-93093 01	DC/DC Converter, 5W, +12V
5962-93094 01	DC/DC Converter, 5W, +15V
5962-93134 01	Voltage Regulator
02	
03	
04	
05	

PRODUCT TYPE/DESCRIPTIONS

SMD/ DEVICE TYPE	DESCRIPTION
5962-93134 06	Voltage Regulator
5962-93140 01	Optocoupler, Single Channel, Power MOSFET
5962-93154 01	Memory, EEPROM, 128k x 8-bit
02	200 ns access time
02	150 ns access time
5962-93155 01	Memory, EEPROM, 256K x 8-bit
02	200 ns access time
02	150 ns access time
5962-93156 01	Memory, Static RAM, CMOS, 128K x 8-bit
02	120 ns access time
02	100 ns access time
03	85 ns access time
04	70 ns access time
05	55 ns access time
06	45 ns access time
07	35 ns access time
08	25 ns access time
5962-93157 01	Memory, Static RAM, CMOS, 256K x 8-bit
02	120 ns access time
02	100 ns access time
03	85 ns access time
04	70 ns access time
05	55 ns access time
06	45 ns access time
07	35 ns access time
08	25 ns access time
5962-93158 01	DC/DC Converter, 30W, triple channel
01	+5, +/-12V output
5962-94506 01	Analog Multiplexer

**APPROVED SOURCE
MASTER PRODUCT LISTING**

PRODUCT ELIGIBILITY: The manufacturers listed below have certified that the following Hybrid Microcircuits are built, tested, and shipped using MIL-STD-1772 CERTIFIED FLOW/QUALIFIED MATERIALS and MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

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STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE
9102001HXX	AFC-461/CH	Advanced Analog Incorporated
9102001HZX	AFC-461F/CH	Advanced Analog Incorporated
7801301GX	CTS0002XB	CTS Corporation
7801301XX	CTS0002	CTS Corporation
7801301XX	ELH0002H/883B	Elantec Incorporated
8001301ZX	CTS0032ZB	CTS Corporation
8001301ZX	ELH0032G/883B	Elantec Incorporated
8001401ZX	CTS0033ZB	CTS Corporation
8001401ZX	ELH0033G/883B	Elantec Incorporated
8102801EX	6N134/883B	Hewlett-Packard Company
8102801EX	66013-001	Micropac Industries Incorporated
8102801TX	6N134/883B#300	Hewlett-Packard Company
8102801UX	6N134/883B#100	Hewlett-Packard Company
8102801XX	66072-001/883B	Micropac Industries Incorporated
8102802PX	HCPL-5631	Hewlett-Packard Company
8102802PX	66056-103	Micropac Industries Incorporated
8102802YX	HCPL-5631#100	Hewlett-Packard Company
8102802ZX	HCPL-5631#300	Hewlett-Packard Company
8102803ZX	HCPL-6631	Hewlett-Packard Company
8102803ZX	66123-001	Micropac Industries Incorporated
8300201JX	DAC87	Analog Devices Incorporated
8302401EX	6N140A/883B	Hewlett-Packard Company
8302401EX	6N140/883B	Micropac Industries Incorporated
85030013X	-----	NO APPROVED SOURCE
8503001CX	HS2700SD/883B	Sipex Corporation
8503001YX	2700SD	Analog Devices Incorporated
8503001YX	HC2700SD/883B	Hycomp Incorporated
85030023X	-----	NO APPROVED SOURCE
8503002CX	HS2700UD/883B	Sipex Corporation
8503002YX	2700UD	Analog Devices Incorporated
8503002YX	HC2700UD/883B	Hycomp Incorporated
85030033X	-----	NO APPROVED SOURCE
8503003CX	HS2702SD/883B	Sipex Corporation
8503003YX	2701SD	Analog Devices Incorporated
8503003YX	HC2702SD/883B	Hycomp Incorporated
85030043X	-----	NO APPROVED SOURCE
8503004CX	HS2702UD/883B	Sipex Corporation
8503004YX	2702SD	Analog Devices Incorporated
8503004YX	HC2702UD/883B	Hycomp Incorporated
85030053X	-----	NO APPROVED SOURCE

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STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE
8503005CX	HS2701SD/883B	Sipex Corporation
8503005YX	2702UD	Analog Devices Incorporated
8503005YX	HC2701SD/883B	Hycomp Incorporated
85030063X	-----	NO APPROVED SOURCE
8503006CX	HS2701UD/883B	Sipex Corporation
8503006YX	2701UD	Analog Devices Incorporated
8503006YX	HC2701UD/883B	Hycomp Incorporated
8508701ZX	CTS0041ZB	CTS Corporation
8508701ZX	ELH0041G/883B	Elantec Incorporated
8508801YX	CTS0021ZB	CTS Corporation
8508801YX	ELH0021K/883B	Elantec Incorporated
8508901YX	ELH0101AK/883B	Elantec Incorporated
8508902YX	ELH0101K/883B	Elantec Incorporated
5962-8604902TX	BUS63106II	ILC Data Device Corporation
5962-8604902XC	BUS63105	ILC Data Device Corporation
5962-8604902ZX	BUS63105II	ILC Data Device Corporation
5962-8604903YX	ARX2402	Aeroflex Laboratories Incorporated
5962-8604904UX	ARX3402	Aeroflex Laboratories Incorporated
5962-8604905XX	BUS63100-617	ILC Data Device Corporation
5962-8604906TX	-----	NO APPROVED SOURCE
5962-8604906YX	NHI-1509	National Hybrid Incorporated
5962-8604907XX	FC155361	C-MAC Microcircuits Limited
5962-8604908XX	FC155362	C-MAC Microcircuits Limited
5962-8753501XA	BUS65112	ILC Data Device Corporation
5962-8753501YC	BUS65117	ILC Data Device Corporation
5962-8753502XX	ARX2452	Aeroflex Laboratories Incorporated
5962-8753502YX	ARX2452FP	Aeroflex Laboratories Incorporated
5962-8757902XX	BUS63125II	ILC Data Device Corporation
5962-8757902YC	BUS63126II	ILC Data Device Corporation
5962-8757903XX	ARX2411	Aeroflex Laboratories Incorporated
5962-8757903YX	ARX2411FP	Aeroflex Laboratories Incorporated
5962-8757904XX	ARX3411	Aeroflex Laboratories Incorporated
5962-8757904YX	ARX3411FP	Aeroflex Laboratories Incorporated
5962-8757905XX	NHI-1500	National Hybrid Incorporated
5962-8757905YX	NHI-1500FP	National Hybrid Incorporated
5962-8757906XX	FC1553623	C-MAC Microcircuits Limited
5962-8757906YX	FC1553623FP	C-MAC Microcircuits Limited
5962-8757907XX	CT1487-D	Marconi Circuit Technology Corporation
5962-8757907YX	CT1487-DFP	Marconi Circuit Technology Corporation
5962-8757908XC	MR63125MPR	Medtronic Incorporated
5962-8761701XX	CTS00061B	CTS Corporation
5962-8761702XX	CTS00081B	CTS Corporation
5962-8762001XX	MIOP42106/883	Micropac Industries Incorporated
5962-8762002HXX	PA51M/883	Apex Microtechnology Incorporated
5962-8763201XX	-----	NO APPROVED SOURCE
5962-8767901EX	4N55/883B	Hewlett-Packard Company
5962-8767901EX	4N55/883B	Micropac Industries Incorporated
5962-8767901TX	4N55/883B#300	Hewlett-Packard Company
5962-8767901UX	4N55/883B#100	Hewlett-Packard Company
5962-8767902PX	HCPL-5531	Hewlett-Packard Company

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STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE
5962-8767902PX	66126-103	Micropac Industries Incorporated
5962-8767902XX	HCPL-5531#300	Hewlett-Packard Company
5962-8767902YX	HCPL-5531#100	Hewlett-Packard Company
5962-87679032A	HCPL-6531	Hewlett-Packard Company
5962-8768701XC	HSDC8920A883B	ILC Data Device Corporation
5962-8768701YX	RDC14505-638C	ILC Data Device Corporation
5962-8768702XC	RDC14505-639	ILC Data Device Corporation
5962-8768702YX	RDC14505-639C	ILC Data Device Corporation
5962-8768703XC	RDC14505-641	ILC Data Device Corporation
5962-8768703YX	RDC14505-641C	ILC Data Device Corporation
5962-8768801XX	MN3008H/B	Micronetworks Corporation
5962-8768802XX	MN3009H/B	Micronetworks Corporation
5962-8850801XX	ADC-HX/883B	Datel Incorporated
5962-8850802XX	ADC-HZ/883B	Datel Incorporated
5962-8850802XX	MNADC87H/B	Micronetworks Corporation
5962-8850901XX	AD390S	Analog Devices Incorporated
5962-8850902XX	AD390T	Analog Devices Incorporated
5962-8851001XX	AD394S	Analog Devices Incorporated
5962-8851002XX	AD394T	Analog Devices Incorporated
5962-8851401XX	HS9403B-8	Sipex Corporation
5962-8851402XX	HS9403B-16	Sipex Corporation
5962-8851701XX	DAC02310-112	ILC Data Device Corporation
5962-8851701YX	DAC02311-112	ILC Data Device Corporation
5962-8851702XX	DAC02310-113	ILC Data Device Corporation
5962-8851702YX	DAC02311-113	ILC Data Device Corporation
5962-8854201XX	ADC00300-112	ILC Data Device Corporation
5962-8854201YX	ADC00302-112	ILC Data Device Corporation
5962-8857901XC	HOS-050A	Analog Devices Incorporated
5962-8857901XX	-----	NO APPROVED SOURCE
5962-8857902XC	HOS-060SH	Analog Devices Incorporated
5962-8857902XX	-----	NO APPROVED SOURCE
5962-8858501XX	-----	NO APPROVED SOURCE
5962-8858501YX	-----	NO APPROVED SOURCE
5962-8858601XX	BUS66300II883B	ILC Data Device Corporation
5962-8858601YC	BUS66301III883	ILC Data Device Corporation
5962-8862901XX	-----	NO APPROVED SOURCE
5962-8865801XX	AD578X	Analog Devices Incorporated
5962-8865802XX	AD578T	Analog Devices Incorporated
5962-8865803XX	AD578ZSD	Analog Devices Incorporated
5962-8865804XX	AD578ZTD	Analog Devices Incorporated
5962-8869201TX	BUS61563II-601	ILC Data Device Corporation
5962-8869201XA	BUS61553II-140	DDC Ireland Limited
5962-8869201XA	BUS61553II-150	DDC Ireland Limited
5962-8869201XC	BUS61553II-130	DDC Ireland Limited
5962-8869201XC	BUS61553II-883	DDC Ireland Limited
5962-8869201XX	BUS61553-883B	ILC Data Device Corporation
5962-8869201YX	BUS61563-883B	ILC Data Device Corporation
5962-8869201ZX	BUS61563-883B	ILC Data Device Corporation
5962-8869202XA	BUS61554II-140	DDC Ireland Limited
5962-8869202XA	BUS61554II-150	DDC Ireland Limited

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STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE
5962-8869202XC	BUS61554II-130	DDC Ireland Limited
5962-8869202XC	BUS61554II-883	DDC Ireland Limited
5962-8869202XX	BUS61554-883B	ILC Data Device Corporation
5962-8869202YC	BUS61564-883B	ILC Data Device Corporation
5962-8869202ZX	BUS61564-883B	ILC Data Device Corporation
5962-8869203XC	BUS61555-883B	ILC Data Device Corporation
5962-8869203YC	BUS61565-883B	ILC Data Device Corporation
5962-8869203ZC	BUS61565-883B	ILC Data Device Corporation
5962-8869204XC	BUS61556-883B	ILC Data Device Corporation
5962-8870101YX	OMA541SDB	Omnirel Corporation
5962-8876801PX	HCPL-5201	Hewlett-Packard Company
5962-8876801XX	-----	NO APPROVED SOURCE
5962-8876801YX	-----	NO APPROVED SOURCE
5962-8876901PX	HCPL-5231	Hewlett-Packard Company
5962-8876901XX	HCPL-5231#300	Hewlett-Packard Company
5962-8876901YX	HCPL-5231#100	Hewlett-Packard Company
5962-88769022X	HCPL-6231	Hewlett-Packard Company
5962-8877601XX	HS1068B	Sipex Corporation
5962-8944701HUX	ARX3436	Aeroflex Laboratories Incorporated
5962-8944701HXX	ARX3416	Aeroflex Laboratories Incorporated
5962-8944701HYX	ARX3416FP	Aeroflex Laboratories Incorporated
5962-8944701HZX	ARX3436FP	Aeroflex Laboratories Incorporated
5962-8944702XX	NHI-1501	National Hybrid Incorporated
5962-8944702YX	NHI-1501FP	National Hybrid Incorporated
5962-8944703XX	FC1553622	C-MAC Microcircuits Limited
5962-8944703YX	FC1553622FP	C-MAC Microcircuits Limited
5962-8944704HXC	BUS63135II	ILC Data Device Corporation
5962-8944704HYC	BUS63136II	ILC Data Device Corporation
5962-8947701PX	HCPL-5761	Hewlett-Packard Company
5962-8947701XX	HCPL-5761#300	Hewlett-Packard Company
5962-8947701YX	HCPL-5761#100	Hewlett-Packard Company
5962-8949001XX	OM7509SC/883B	Omnirel Corporation
5962-8949002XX	OM7501SC/883B	Omnirel Corporation
5962-8949003XX	OM7502SC/883B	Omnirel Corporation
5962-8949004XX	OM7503SC/883B	Omnirel Corporation
5962-8949005XX	OM7504SC/883B	Omnirel Corporation
5962-8949006XX	OM7505SC/883B	Omnirel Corporation
5962-8949007XX	OM7506SC/883B	Omnirel Corporation
5962-8949008XX	OM7507SC/883B	Omnirel Corporation
5962-8949009XX	OM7508SC/883B	Omnirel Corporation
5962-8949801XX	SDC14561III114	ILC Data Device Corporation
5962-8949801YX	-----	NO APPROVED SOURCE
5962-8949802XX	SDC14561III115	ILC Data Device Corporation
5962-8949802YX	-----	NO APPROVED SOURCE
5962-8949803XX	-----	NO APPROVED SOURCE
5962-8949804XX	-----	NO APPROVED SOURCE
5962-8949805XX	-----	NO APPROVED SOURCE
5962-8949805YX	-----	NO APPROVED SOURCE
5962-8949901XX	SDC14560III1-607	ILC Data Device Corporation
5962-8949901YX	-----	NO APPROVED SOURCE

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STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE
5962-8949902XX	SDC14560III1-608	ILC Data Device Corporation
5962-8949902YX	-----	NO APPROVED SOURCE
5962-8949903XC	SDC14560III605	ILC Data Device Corporation
5962-8949903XX	-----	NO APPROVED SOURCE
5962-8949903YX	-----	NO APPROVED SOURCE
5962-8949904XX	HSD1066-341H/2	Natel Engineering Corporation
5962-8949905XX	HSD1066-341V/2	Natel Engineering Corporation
5962-8949906XX	HSD1066-C778H/2	Natel Engineering Corporation
5962-8950901XX	RGBDAC3808H/B	Advanced Analog Incorporated
5962-8952202XX	ARX-2453	Aeroflex Laboratories Incorporated
5962-8952202YX	ARX-2453FP	Aeroflex Laboratories Incorporated
5962-8952203XX	NHI-1529	National Hybrid Incorporated
5962-8952203YX	NHI-1529FP	National Hybrid Incorporated
5962-8952206XX	FC1553921	C-MAC Microcircuits Limited
5962-8952206YX	FC1553921FP	C-MAC Microcircuits Limited
5962-8952207XX	FC1553923	C-MAC Microcircuits Limited
5962-8952207YX	FC1553923	C-MAC Microcircuits Limited
5962-8952208XX	ARX-3453	Aeroflex Laboratories Incorporated
5962-8952208YX	ARX-3453FP	Aeroflex Laboratories Incorporated
5962-8952801XX	DAC HKB/883B	Datel Incorporated
5962-8952802XX	DAC HKB-2/883B	Datel Incorporated
5962-8953101XX	DAC HPB/883B	Datel Incorporated
5962-8953102HYX	MN3292T/B-V	Micronetworks Corporation
5962-8953102XX	DAC HPB-1/883B	Datel Incorporated
5962-8953103HYX	MN3290T/B-V	Micronetworks Corporation
5962-8953104HYX	MN3291T/B-V	Micronetworks Corporation
5962-8956301HXX	MN5290H/B	Micronetworks Corporation
5962-8956302HXX	MN5291H/B	Micronetworks Corporation
5962-8956501XX	HS362SB	Sipex Corporation
5962-8956601HCX	HS9716TB	Sipex Corporation
5962-8956901HXX	MN5295H/B	Micronetworks Corporation
5962-8957001PX	HCPL-5401	Hewlett-Packard Company
5962-8957001XX	HCPL-5401#300	Hewlett-Packard Company
5962-8957001YX	HCPL-5401#100	Hewlett-Packard Company
5962-8957101PX	HCPL-5431	Hewlett-Packard Company
5962-8957101XX	HCPL-5431#300	Hewlett-Packard Company
5962-8957101YX	HCPL-5431#100	Hewlett-Packard Company
5962-89571022X	HCPL-6431	Hewlett-Packard Company
5962-8957201EX	HCPL-1931	Hewlett-Packard Company
5962-8958301YX	MN5200H/B	Micronetworks Corporation
5962-8958302YX	MN5203H/B	Micronetworks Corporation
5962-8958303YX	MN5201H/B	Micronetworks Corporation
5962-8958304YX	MN5204H/B	Micronetworks Corporation
5962-8958305YX	MN5202H/B	Micronetworks Corporation
5962-8958306YX	MN5205H/B	Micronetworks Corporation
5962-8958307YX	MN5206H/B	Micronetworks Corporation
5962-8958401YX	MN5210H/B	Micronetworks Corporation
5962-8958402YX	MN5213H/B	Micronetworks Corporation
5962-8958403YX	MN5211H/B	Micronetworks Corporation
5962-8958404YX	MN5214H/B	Micronetworks Corporation

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STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE
5962-8958405YX	MN5212H/B	Micronetworks Corporation
5962-8958406YX	MN5215H/B	Micronetworks Corporation
5962-8958407YX	MN5216H/B	Micronetworks Corporation
5962-8959201XX	ARX3407	Aeroflex Laboratories Incorporated
5962-8959201YX	ARX3407FP	Aeroflex Laboratories Incorporated
5962-8959202XX	ARX3404	Aeroflex Laboratories Incorporated
5962-8959202YX	ARX3404FP	Aeroflex Laboratories Incorporated
5962-8959203XX	ARX3407-001	Aeroflex Laboratories Incorporated
5962-8959203YX	ARX3407-001FP	Aeroflex Laboratories Incorporated
5962-8959204XX	ARX3404-001	Aeroflex Laboratories Incorporated
5962-8959204YX	ARX3404-001FP	Aeroflex Laboratories Incorporated
5962-8959205XX	ARX3467	Aeroflex Laboratories Incorporated
5962-8959205YX	ARX3467FP	Aeroflex Laboratories Incorporated
5962-8959206XX	ARX3464	Aeroflex Laboratories Incorporated
5962-8959206YX	ARX3464FP	Aeroflex Laboratories Incorporated
5962-8959401XX	CLC231A8C	Comlinear Corporation
5962-8959501XX	MN5245H/B	Micronetworks Corporation
5962-8959502XX	MN5245AH/B	Micronetworks Corporation
5962-8959503XX	MN5246H/B	Micronetworks Corporation
5962-8959504XX	MN5246AH/B	Micronetworks Corporation
5962-8965901XX	EL2004G/883B	Elantec Incorporated
5962-8965901YX	-----	NO APPROVED SOURCE
5962-8968301HXX	AHE2805S/CH	Advanced Analog Incorporated
5962-8968301HZX	AHE2805SF/CH	Advanced Analog Incorporated
5962-8968302HXX	AHE2805S/CHSLV	Advanced Analog Incorporated
5962-8968302HZX	AHE2805SFCHSLV	Advanced Analog Incorporated
5962-8968303HXX	AHE2805S/CHMST	Advanced Analog Incorporated
5962-8968303HZX	AHE2805SFCHMST	Advanced Analog Incorporated
5962-8971801XX	MN3020H/B	Micronetworks Corporation
5962-8971801YX	HS3020B	Sipex Corporation
5962-8978501PX	HCPL-5731	Hewlett-Packard Company
5962-8978501PX	66058-003	Micropac Industries Incorporated
5962-8978501XX	66071-001	Micropac Industries Incorporated
5962-8978501YX	HCPL-5731#100	Hewlett-Packard Company
5962-8978501ZX	HCPL-5731#300	Hewlett-Packard Company
5962-89785022X	HCPL-6731	Hewlett-Packard Company
5962-89785022X	66124-001	Micropac Industries Incorporated
5962-89785032X	66125-001	Micropac Industries Incorporated
5962-8979801XX	BUS-65142	ILC Data Device Corporation
5962-8979801YX	BUS-65144	ILC Data Device Corporation
5962-8979802XX	BUS-65143-883B	ILC Data Device Corporation
5962-8979802YX	BUS-65145-883B	ILC Data Device Corporation
5962-8979901XX	FC155391	C-MAC Microcircuits Limited
5962-8979901YX	FC155391FP	C-MAC Microcircuits Limited
5962-8979902XX	FC155392	C-MAC Microcircuits Limited
5962-8979902YX	FC155392FP	C-MAC Microcircuits Limited
5962-8981001PX	HCPL-5701	Hewlett-Packard Company
5962-8981001PX	66058-105	Micropac Industries Incorporated
5962-8981001XX	-----	NO APPROVED SOURCE
5962-8981001YX	-----	NO APPROVED SOURCE

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STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE
5962-89813013X	-----	NO APPROVED SOURCE
5962-8981301GX	-----	NO APPROVED SOURCE
5962-8982601XC	BUS63127II	ILC Data Device Corporation
5962-8982601YC	BUS63128II	ILC Data Device Corporation
5962-8982602XX	ARX3419	Aeroflex Laboratories Incorporated
5962-8982602YX	ARX3419FP	Aeroflex Laboratories Incorporated
5962-8982603XX	NHI-1502	National Hybrid Incorporated
5962-8982603YX	NHI-1502FP	National Hybrid Incorporated
5962-8982604XX	NHI-1523	National Hybrid Incorporated
5962-8982604YX	NHI-1523FP	National Hybrid Incorporated
5962-8982605XX	FC1553721	C-MAC Microcircuits Limited
5962-8982605YX	FC1553721FP	C-MAC Microcircuits Limited
5962-8982606XX	CT1589-D	Marconi Circuit Technology Corporation
5962-8982606YX	CT1589-DFP	Marconi Circuit Technology Corporation
5962-8985801XX	CLC206A8C	Comlinear Corporation
5962-8986201XC	HS9378T/S	Sipex Corporation
5962-8986202XC	HS9378S/B	Sipex Corporation
5962-8990801XX	SDC14565III114	ILC Data Device Corporation
5962-8990801YX	SDC14565-629	ILC Data Device Corporation
5962-8990801ZX	SDC14565-621	ILC Data Device Corporation
5962-8990802XX	SDC14565III115	ILC Data Device Corporation
5962-8990802YX	SDC14565-630	ILC Data Device Corporation
5962-8990802ZX	SDC14565-622	ILC Data Device Corporation
5962-8990803XC	SDC14565-616	ILC Data Device Corporation
5962-8990803ZC	SDC14565-616C	ILC Data Device Corporation
5962-8990804XX	SDC14565III115	ILC Data Device Corporation
5962-8990804YX	SDC14566-609	ILC Data Device Corporation
5962-8990804ZX	SDC14566-608	ILC Data Device Corporation
5962-8990805XX	SDC14565-618	ILC Data Device Corporation
5962-8990805ZX	SDC14565-618C	ILC Data Device Corporation
5962-8990806XX	HRD1066-341H/2	Natel Engineering Corporation
5962-8990807XX	HRD1066-381V/2	Natel Engineering Corporation
5962-8990808XX	HRD1066-381H/2	Natel Engineering Corporation
5962-8991001XX	CLC200A8C	Comlinear Corporation
5962-8991101XX	CLC220A8C	Comlinear Corporation
5962-8994001HXX	AD346SD/883	Analog Devices Incorporated
5962-8997901XX	SP1078B	Sipex Corporation
5962-8998601HXX	DSC11520-112	ILC Data Device Corporation
5962-8998602HXX	DSC11520-113	ILC Data Device Corporation
5962-8998603HXX	DSC11520-114	ILC Data Device Corporation
5962-8998604HXX	DSC11520-115	ILC Data Device Corporation
5962-9055101XC	SDC14567III111	ILC Data Device Corporation
5962-9055101XX	-----	NO APPROVED SOURCE
5962-9055101YX	-----	NO APPROVED SOURCE
5962-9055102XC	SDC14567III112	ILC Data Device Corporation
5962-9055102XX	-----	NO APPROVED SOURCE
5962-9055102YX	-----	NO APPROVED SOURCE
5962-9055103XC	SDC14567III114	ILC Data Device Corporation
5962-9055103XX	-----	NO APPROVED SOURCE
5962-9055103YX	-----	NO APPROVED SOURCE

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STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE
5962-9055104XC	SDC14567III115	ILC Data Device Corporation
5962-9055104XX	-----	NO APPROVED SOURCE
5962-9055104YX	-----	NO APPROVED SOURCE
5962-9055105XC	SDC14569III111	ILC Data Device Corporation
5962-9055105XX	-----	NO APPROVED SOURCE
5962-9055105ZX	-----	NO APPROVED SOURCE
5962-9055106XC	SDC14569III112	ILC Data Device Corporation
5962-9055106XX	-----	NO APPROVED SOURCE
5962-9055106YX	-----	NO APPROVED SOURCE
5962-9055107XC	SDC14569III114	ILC Data Device Corporation
5962-9055107XX	-----	NO APPROVED SOURCE
5962-9055107YX	-----	NO APPROVED SOURCE
5962-9055108XC	SDC14569III115	ILC Data Device Corporation
5962-9055108XX	-----	NO APPROVED SOURCE
5962-9055108YX	-----	NO APPROVED SOURCE
5962-9055401XC	HSDC8915A883B	ILC Data Device Corporation
5962-9055401XX	XDC14507-628	ILC Data Device Corporation
5962-9055401YX	XDC14507-628	ILC Data Device Corporation
5962-9055402XC	HSDC8915883B	ILC Data Device Corporation
5962-9055402XX	XDC14507-627	ILC Data Device Corporation
5962-9055402YX	XDC14507-627	ILC Data Device Corporation
5962-9057001HXX	MN3860H/B	Micronetworks Corporation
5962-9063001HXX	SP9760B	Sipex Corporation
5962-9063101HXX	SP9588	Sipex Corporation
5962-9063401HXX	ADH030-II12-1	ILC Data Device Corporation
5962-9063601XX	CT1820	Marconi Circuit Technology Corporation
5962-9063602XX	CT1820-2	Marconi Circuit Technology Corporation
5962-9063602YX	CT1820-2FP	Marconi Circuit Technology Corporation
5962-9063603HXX	ARX2410	Aeroflex Laboratories Incorporated
5962-9063604HXX	ARX3410	Aeroflex Laboratories Incorporated
5962-9063801HXX	PA07M/883	Apex Microtechnology Incorporated
5962-9063801HXX	MIOP42114/883	Micropac Industries Incorporated
5962-9065901HXX	PA12M/883	Apex Microtechnology Incorporated
5962-9065901HXX	MIOP42109/883	Micropac Industries Incorporated
5962-9066601HXX	AD9005ATM/883B	Analog Devices Incorporated
5962-9067901HXX	PA02M/883	Apex Microtechnology Incorporated
5962-9067901HXX	MIOP42120/883	Micropac Industries Incorporated
5962-9070701HXC	SDC14500-635	ILC Data Device Corporation
5962-9070701HXX	SDC14500-635	ILC Data Device Corporation
5962-9070701HYX	HSDC-8917II-1-A	ILC Data Device Corporation
5962-9070702HXC	SDC14500-636	ILC Data Device Corporation
5962-9070702HXX	SDC14500-636	ILC Data Device Corporation
5962-9070702HYX	HSDC-8917II-1	ILC Data Device Corporation
5962-9070703HXC	SDC14502-605	ILC Data Device Corporation
5962-9070703HXX	SDC14502-605	ILC Data Device Corporation
5962-9070703HYX	HSDC-8919II-1-A	ILC Data Device Corporation
5962-9070704HXC	SDC14502-606	ILC Data Device Corporation
5962-9070704HXX	SDC14502-606	ILC Data Device Corporation
5962-9070704HYX	HSDC-8919II-1	ILC Data Device Corporation
5962-9070705HXX	HSD1024-C672H/2	Natel Engineering Corporation

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STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE
5962-9070706HXX	HSD1024-C673H/2	Natel Engineering Corporation
5962-9070707HXX	HSD1024-C674H/2	Natel Engineering Corporation
5962-9070708HXX	HSD1024-C675H/2	Natel Engineering Corporation
5962-9072301HXX	PA08M/883	Apex Microtechnology Incorporated
5962-9072301HXX	MIOP42116/883	Micropac Industries Incorporated
5962-9073001HXX	MN376H/B	Micronetworks Corporation
5962-9073001YX	HTC-0300AM/883	Analog Devices Incorporated
5962-9073601HXX	PA84M/883	Apex Microtechnology Incorporated
5962-9079501HXX	HS9576S/B	Sipex Corporation
5962-9079502HXX	HS9576T/B	Sipex Corporation
5962-9079701HXX	MN7140H/B	Micronetworks Corporation
5962-9082001HXC	SDC14531-690	ILC Data Device Corporation
5962-9082002HXC	SDC14531-631	ILC Data Device Corporation
5962-9082801HXX	PA10M/883	Apex Microtechnology Incorporated
5962-9082801HXX	MIOP42115/883	Micropac Industries Incorporated
5962-9082901TX	FC155371FP	C-MAC Microcircuits Limited
5962-9082901XX	FC155371	C-MAC Microcircuits Limited
5962-9082901YX	FC155371SSW	C-MAC Microcircuits Limited
5962-9082902XX	FC155372	C-MAC Microcircuits Limited
5962-9082903HUX	ARX3420	Aeroflex Laboratories Incorporated
5962-9082904HUX	ARX3424	Aeroflex Laboratories Incorporated
5962-9082905TX	NHI-1531FP	National Hybrid Incorporated
5962-9082905YX	NHI-1531	National Hybrid Incorporated
5962-9082906TX	NHI-1545FP	National Hybrid Incorporated
5962-9082906YX	NHI-1545	National Hybrid Incorporated
5962-9082908HXX	CT1589-M	Marconi Circuit Technology Corporation
5962-9082908HYX	CT1589-MI	Marconi Circuit Technology Corporation
5962-9083301HXX	CLC201A8C	Comlinear Corporation
5962-9083501HXX	CLC205A8C	Comlinear Corporation
5962-9083601HXX	CLC221A8C	Comlinear Corporation
5962-9085401HPX	HCPL-5501	Hewlett-Packard Company
5962-9085401HPX	66126-105	Micropac Industries Incorporated
5962-9085501HPX	HCPL-5601	Hewlett-Packard Company
5962-9085501HXX	-----	NO APPROVED SOURCE
5962-9085501HYX	-----	NO APPROVED SOURCE
5962-9090201HXX	MSK332B-12	M S Kennedy Corporation
5962-9090202HXX	MSK332B-15	M S Kennedy Corporation
5962-9095401HXX	ATO2815T/CH	Advanced Analog Incorporated
5962-9095401HZX	ATO2815TF/CH	Advanced Analog Incorporated
5962-9097701HXX	CLC207A8C	Comlinear Corporation
5962-9099501HXX	CLC925B8C	Comlinear Corporation
5962-9155901HXX	HDSR2056P-34VR/2	Natel Engineering Corporation
5962-9155902HXX	HDSR2056P-34VS/2	Natel Engineering Corporation
5962-9155903HXX	HDSR2056P-34H/2	Natel Engineering Corporation
5962-9155904HXX	HDSR2056P-34S/2	Natel Engineering Corporation
5962-9156001HXX	HSD1046-341V/2	Natel Engineering Corporation
5962-9156002HXX	HSD1046-341H/2	Natel Engineering Corporation
5962-9156003HXX	HSD1046-341S/2	Natel Engineering Corporation
5962-9157501HXX	AHE2815D/CH	Advanced Analog Incorporated
5962-9157501HZX	AHE2815DF/CH	Advanced Analog Incorporated

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STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE
5962-9157502HXX	AHE2815D/CHSLV	Advanced Analog Incorporated
5962-9157502HZX	AHE2815DFCHSLV	Advanced Analog Incorporated
5962-9157503HXX	AHE2815DCHMSTR	Advanced Analog Incorporated
5962-9157503HZX	AHE2815DFCHMST	Advanced Analog Incorporated
5962-9157901HZX	ATW2805SCH	Advanced Analog Incorporated
5962-9157902HZX	ATW2805SCH-SLV	Advanced Analog Incorporated
5962-9157903HZX	ATW2805SCHMSTR	Advanced Analog Incorporated
5962-9158001HXX	AHE2812S/CH	Advanced Analog Incorporated
5962-9158001HZX	AHE2812SF/CH	Advanced Analog Incorporated
5962-9158002HXX	AHE2812S/CHSLV	Advanced Analog Incorporated
5962-9158002HZX	AHE2812SFCHSLV	Advanced Analog Incorporated
5962-9158003HXX	AHE2812SCHMSTR	Advanced Analog Incorporated
5962-9158003HZX	AHE2812SFCHMST	Advanced Analog Incorporated
5962-9160001HXX	AHF2805S/CH	Advanced Analog Incorporated
5962-9160101HXX	MHF-2815S/883	Interpoint Corporation
5962-9160201HXX	ATO2812T/CH	Advanced Analog Incorporated
5962-9160201HZX	ATO2812TF/CH	Advanced Analog Incorporated
5962-9161301HZX	ATW2815D/CH	Advanced Analog Incorporated
5962-9161302HZX	ATW2815D/CHSLV	Advanced Analog Incorporated
5962-9161303HZX	ATW2815DCHMSTR	Advanced Analog Incorporated
5962-9161401HXX	MHF-2815D/883	Interpoint Corporation
5962-9161501HXX	HSD1510-369/2	Natel Engineering Corporation
5962-9162101HXX	PA83M/883	Apex Microtechnology Incorporated
5962-9162501HXX	AHE2815S/CH	Advanced Analog Incorporated
5962-9162501HZX	AHE2815SF/CH	Advanced Analog Incorporated
5962-9162502HXX	AHE2815S/CHSLV	Advanced Analog Incorporated
5962-9162502HZX	AHE2815SF/CHSL	Advanced Analog Incorporated
5962-9162503HXX	AHE2815SCHMST	Advanced Analog Incorporated
5962-9162503HZX	AHE2815SFCHMS	Advanced Analog Incorporated
5962-9166401HXX	MHF-2815S/883	Interpoint Corporation
5962-9166501HXX	CLC232A8C	Comlinear Corporation
5962-9167601HPX	66079-001	Micropac Industries Incorporated
5962-9168701HXX	NHI-1553RT	National Hybrid Incorporated
5962-9168701HYX	NHI-1553RTFP	National Hybrid Incorporated
5962-9168702HXX	NHI-1554RT	National Hybrid Incorporated
5962-9168702HYX	NHI-1554RTFP	National Hybrid Incorporated
5962-9170001HXX	PA09M/883	Apex Microtechnology Incorporated
5962-9170001HXX	MIOP42119/883	Micropac Industries Incorporated
5962-9171201HXX	AD1385TD/883B	Analog Devices Incorporated
5962-9173401HXX	BUS61559	ILC Data Device Corporation
5962-9173401HYX	BUS61569	ILC Data Device Corporation
5962-9173401HZX	BUS61569	ILC Data Device Corporation
5962-9173402HXX	BUS61560	ILC Data Device Corporation
5962-9173402HYX	BUS61570	ILC Data Device Corporation
5962-9173402HZX	BUS61570	ILC Data Device Corporation
5962-9173403HXX	BUS61561	ILC Data Device Corporation
5962-9173403HYX	BUS61571	ILC Data Device Corporation
5962-9173403HZX	BUS61571	ILC Data Device Corporation
5962-9173404HXX	BUS61559-601	ILC Data Device Corporation
5962-9173404HYX	BUS61569-601	ILC Data Device Corporation

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STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE
5962-9173404HZX	BUS61569-601	ILC Data Device Corporation
5962-9173601HXX	SDC14600-112	ILC Data Device Corporation
5962-9173602HXX	SDC14600T-112	ILC Data Device Corporation
5962-9173603HXX	SDC14601-112	ILC Data Device Corporation
5962-9173604HXX	SDC14601T-112	ILC Data Device Corporation
5962-9173605HXX	SDC14605-112	ILC Data Device Corporation
5962-9173606HXX	SDC14605T-112	ILC Data Device Corporation
5962-9173607HXX	SDC14606-112	ILC Data Device Corporation
5962-9173608HXX	SDC14606T-112	ILC Data Device Corporation
5962-9173609HXX	SDC14605-114	ILC Data Device Corporation
5962-9173610HXX	SDC14605T-112	ILC Data Device Corporation
5962-9173611HXX	SDC14606-114	ILC Data Device Corporation
5962-9173612HXX	SDC14606T-112	ILC Data Device Corporation
5962-9174905HZX	MR3231MP5	Medtronic Incorporated
5962-9174906HZX	MR3232MP2	Medtronic Incorporated
5962-9174907HZX	MR3232MP5	Medtronic Incorporated
5962-9174908HTX	ARX4407LPFP	Aeroflex Laboratories Incorporated
5962-9174908HXX	ARX4407	Aeroflex Laboratories Incorporated
5962-9174908HYX	ARX4407FP	Aeroflex Laboratories Incorporated
5962-9174909HTX	ARX4404LPFP	Aeroflex Laboratories Incorporated
5962-9174909HXX	ARX4404	Aeroflex Laboratories Incorporated
5962-9174909HYX	ARX4404LP	Aeroflex Laboratories Incorporated
5962-9204001HXX	AHE2812D/CH	Advanced Analog Incorporated
5962-9204001HZX	AHE2812DF/CH	Advanced Analog Incorporated
5962-9204002HXX	AHE2812D/CHSLV	Advanced Analog Incorporated
5962-9204002HZX	AHE2812DFCHSLV	Advanced Analog Incorporated
5962-9204003HXX	AHE2812DCHMSTR	Advanced Analog Incorporated
5962-9204003HZX	AHE2812DFCHMST	Advanced Analog Incorporated
5962-9204801HXX	SDC14570-112	ILC Data Device Corporation
5962-9204802HXX	SDC14571-112	ILC Data Device Corporation
5962-9204803HXX	SDC14575-112	ILC Data Device Corporation
5962-9204804HXX	SDC14576-112	ILC Data Device Corporation
5962-9204805HXX	SDC14575-114	ILC Data Device Corporation
5962-9204806HXX	SDC14576-114	ILC Data Device Corporation
5962-9204901HXX	SDC14572-112	ILC Data Device Corporation
5962-9204902HXX	SDC14574-112	ILC Data Device Corporation
5962-9204903HXX	SDC14577-112	ILC Data Device Corporation
5962-9204904HXX	SDC14579-112	ILC Data Device Corporation
5962-9204905HXX	SDC14577-114	ILC Data Device Corporation
5962-9204906HXX	SDC14579-114	ILC Data Device Corporation
5962-9205001HXX	SDC14573-112	ILC Data Device Corporation
5962-9205002HXX	SDC14578-112	ILC Data Device Corporation
5962-9205003HXX	SDC14578-114	ILC Data Device Corporation
5962-9205101HXX	SDC14602-112	ILC Data Device Corporation
5962-9205102HXX	SDC14602T-112	ILC Data Device Corporation
5962-9205103HXX	SDC14604-112	ILC Data Device Corporation
5962-9205104HXX	SDC14604T-112	ILC Data Device Corporation
5962-9205105HXX	SDC14607-112	ILC Data Device Corporation
5962-9205106HXX	SDC14607T-112	ILC Data Device Corporation
5962-9205107HXX	SDC14609-112	ILC Data Device Corporation

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STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE
5962-9205108HXX	SDC14609T-112	ILC Data Device Corporation
5962-9205109HXX	SDC14607-114	ILC Data Device Corporation
5962-9205110HXX	SDC14607T-114	ILC Data Device Corporation
5962-9205111HXX	SDC14609-114	ILC Data Device Corporation
5962-9205112HXX	SDC14609T-114	ILC Data Device Corporation
5962-9205201HXX	SDC14603-112	ILC Data Device Corporation
5962-9205202HXX	SDC14603T-112	ILC Data Device Corporation
5962-9205203HXX	SDC14608-112	ILC Data Device Corporation
5962-9205204HXX	SDC14608T-112	ILC Data Device Corporation
5962-9205205HXX	SDC14608-114	ILC Data Device Corporation
5962-9205206HXX	SDC14608T-114	ILC Data Device Corporation
5962-9205301HXX	SDC14610-112	ILC Data Device Corporation
5962-9205302HXX	SDC14610T-112	ILC Data Device Corporation
5962-9205303HXX	SDC14611-112	ILC Data Device Corporation
5962-9205304HXX	SDC14611T-112	ILC Data Device Corporation
5962-9205305HXX	SDC14615-112	ILC Data Device Corporation
5962-9205306HXX	SDC14615T-112	ILC Data Device Corporation
5962-9205307HXX	SDC14616-112	ILC Data Device Corporation
5962-9205308HXX	SDC14616T-112	ILC Data Device Corporation
5962-9205309HXX	SDC14615-114	ILC Data Device Corporation
5962-9205310HXX	SDC14615T-114	ILC Data Device Corporation
5962-9205311HXX	SDC14616-114	ILC Data Device Corporation
5962-9205312HXX	SDC14616T-114	ILC Data Device Corporation
5962-9205401HXX	SDC14612-112	ILC Data Device Corporation
5962-9205402HXX	SDC14612T-112	ILC Data Device Corporation
5962-9205403HXX	SDC14614-112	ILC Data Device Corporation
5962-9205404HXX	SDC14614T-112	ILC Data Device Corporation
5962-9205405HXX	SDC14617-112	ILC Data Device Corporation
5962-9205406HXX	SDC14617T-112	ILC Data Device Corporation
5962-9205407HXX	SDC14619-112	ILC Data Device Corporation
5962-9205408HXX	SDC14619T-112	ILC Data Device Corporation
5962-9205409HXX	SDC14617-114	ILC Data Device Corporation
5962-9205410HXX	SDC14617T-114	ILC Data Device Corporation
5962-9205411HXX	SDC14619-114	ILC Data Device Corporation
5962-9205412HXX	SDC14619T-114	ILC Data Device Corporation
5962-9205501HXX	SDC14613-112	ILC Data Device Corporation
5962-9205502HXX	SDC14613T-112	ILC Data Device Corporation
5962-9205503HXX	SDC14618-112	ILC Data Device Corporation
5962-9205504HXX	SDC14618T-112	ILC Data Device Corporation
5962-9205505HXX	SDC14618-114	ILC Data Device Corporation
5962-9205506HXX	SDC14618T-114	ILC Data Device Corporation
5962-9206101HXX	-----	NO APPROVED SOURCE
5962-9206101HXX	-----	NO APPROVED SOURCE
5962-9206101HXX	-----	NO APPROVED SOURCE
5962-9206101HXX	-----	NO APPROVED SOURCE
5962-9206102HXX	-----	NO APPROVED SOURCE
5962-9206102HXX	-----	NO APPROVED SOURCE
5962-9206102HXX	-----	NO APPROVED SOURCE
5962-9206102HXX	-----	NO APPROVED SOURCE
5962-9206103HXX	-----	NO APPROVED SOURCE
5962-9206103HXX	-----	NO APPROVED SOURCE
5962-9206103HXX	-----	NO APPROVED SOURCE

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STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE
5962-9206103HUX	-----	NO APPROVED SOURCE
5962-9206103HZX	-----	NO APPROVED SOURCE
5962-9206104HMX	-----	NO APPROVED SOURCE
5962-9206104HNX	-----	NO APPROVED SOURCE
5962-9206104HTX	-----	NO APPROVED SOURCE
5962-9206104HUX	-----	NO APPROVED SOURCE
5962-9206104HZX	-----	NO APPROVED SOURCE
5962-9206105HMX	-----	NO APPROVED SOURCE
5962-9206105HNX	-----	NO APPROVED SOURCE
5962-9206105HTX	-----	NO APPROVED SOURCE
5962-9206105HUX	-----	NO APPROVED SOURCE
5962-9206106HMX	-----	NO APPROVED SOURCE
5962-9206106HNX	-----	NO APPROVED SOURCE
5962-9206106HTX	-----	NO APPROVED SOURCE
5962-9206106HUX	-----	NO APPROVED SOURCE
5962-9207801HXC	WS-512K8-120CQ	White Technology Incorporated
5962-9207802HXC	WS-512K8-100CQ	White Technology Incorporated
5962-9207803HXC	WS-512K8-85CQ	White Technology Incorporated
5962-9207804HXC	WS-512K8-70CQ	White Technology Incorporated
5962-9207805HXC	WS-512K8-55CQ	White Technology Incorporated
5962-9207806HXC	WS-512K8-45CQ	White Technology Incorporated
5962-9207807HXC	WS-512K8-35CQ	White Technology Incorporated
5962-9207808HXC	WS-512K8-25CQ	White Technology Incorporated
5962-9208502XX	ARX4451	Aeroflex Laboratories Incorporated
5962-9208502YX	ARX4451FP	Aeroflex Laboratories Incorporated
5962-9208503XX	ARX4418	Aeroflex Laboratories Incorporated
5962-9208503YX	ARX4418FP	Aeroflex Laboratories Incorporated
5962-9210901HZX	ATW2812D/CH	Advanced Analog Incorporated
5962-9210902HZX	ATW2812D/CHSLV	Advanced Analog Incorporated
5962-9210903HZX	ATW2812CHMSTR	Advanced Analog Incorporated
5962-9213901HXX	MHF-2805S/883	Interpoint Corporation
5962-9214401HXX	MHF-2812D/883	Interpoint Corporation
5962-9216201HXX	BUS65153	ILC Data Device Corporation
5962-9216201HYX	BUS65163	ILC Data Device Corporation
5962-9216202HXX	BUS65154	ILC Data Device Corporation
5962-9216202HYX	BUS65164	ILC Data Device Corporation
5962-9235101HXX	AHF2815D/CH	Advanced Analog Incorporated
5962-9306501HXX	BU-65170D1	ILC Data Device Corporation
5962-9306501HYX	BU-65170F1	ILC Data Device Corporation
5962-9306501HZX	BU-65170J1	ILC Data Device Corporation
5962-9306502HXX	BU-65170D2	ILC Data Device Corporation
5962-9306502HYX	BU-65170F2	ILC Data Device Corporation
5962-9306502HZX	BU-65170J2	ILC Data Device Corporation
5962-9306503HXX	BU-61580D1	ILC Data Device Corporation
5962-9306503HYX	BU-61580F1	ILC Data Device Corporation
5962-9306503HZX	BU-61580J1	ILC Data Device Corporation
5962-9306504HXX	BU-61580D2	ILC Data Device Corporation
5962-9306504HYX	BU-61580F2	ILC Data Device Corporation
5962-9306504HZX	BU-61580J2	ILC Data Device Corporation
5962-9306505HXX	BU-65171D1	ILC Data Device Corporation

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HYBRID MICROCIRCUITS

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TABLE I

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE
5962-9306505HXX	BU-65171F1	ILC Data Device Corporation
5962-9306505H2X	BU-65171J1	ILC Data Device Corporation
5962-9306506HXX	BU-65171D2	ILC Data Device Corporation
5962-9306506HXX	BU-65171F2	ILC Data Device Corporation
5962-9306506H2X	BU-65171J2	ILC Data Device Corporation
5962-9306507HXX	BU-61581D1	ILC Data Device Corporation
5962-9306507HXX	BU-61581F1	ILC Data Device Corporation
5962-9306507H2X	BU-61581J1	ILC Data Device Corporation
5962-9306508HXX	BU-61581D2	ILC Data Device Corporation
5962-9306508HXX	BU-61581F2	ILC Data Device Corporation
5962-9306508H2X	BU-61581J2	ILC Data Device Corporation
5962-9308901HXX	MSA2812D/883	Interpoint Corporation
5962-9309001HXX	MSA2815D/883	Interpoint Corporation
5962-9309101HXC	WE-512K8-150CQ	White Technology Incorporated
5962-9309102HXC	WE-512K8-300CQ	White Technology Incorporated
5962-9309103HXC	WE-512K8-250CQ	White Technology Incorporated
5962-9309104HXC	WE-512K8-200CQ	White Technology Incorporated
5962-9309201HXX	MSA2805S/883	Interpoint Corporation
5962-9309301HXX	MSA2812S/883	Interpoint Corporation
5962-9309401HXX	MSA2815S/883	Interpoint Corporation
5962-9313401HXX	ARX5006	Aeroflex Laboratories Incorporated
5962-9313402HXX	ARX5007	Aeroflex Laboratories Incorporated
5962-9313403HXX	ARX5008	Aeroflex Laboratories Incorporated
5962-9313404HXX	ARX5009	Aeroflex Laboratories Incorporated
5962-9313405HXX	ARX5010	Aeroflex Laboratories Incorporated
5962-9313406HXX	ARX5011	Aeroflex Laboratories Incorporated
5962-9314001HPX	HSSR-7111	Hewlett-Packard Company
5962-9314001HXX	HSSR-7111#300	Hewlett-Packard Company
5962-9314001HYX	HSSR-7111#200	Hewlett-Packard Company
5962-9315401HXC	WE-128K8-200CQ	White Technology Incorporated
5962-9315402HXC	WE-128K8-150CQ	White Technology Incorporated
5962-9315501HXC	WE-256K8-200CQ	White Technology Incorporated
5962-9315502HXC	WE-256K8-150CQ	White Technology Incorporated
5962-9315601HXC	WS-128K8-120CQ	White Technology Incorporated
5962-9315602HXC	WS-128K8-100CQ	White Technology Incorporated
5962-9315603HXC	WS-128K8-85CQ	White Technology Incorporated
5962-9315604HXC	WS-128K8-70CQ	White Technology Incorporated
5962-9315605HXC	WS-128K8-55CQ	White Technology Incorporated
5962-9315606HXC	WS-128K8-45CQ	White Technology Incorporated
5962-9315607HXC	WS-128K8-35CQ	White Technology Incorporated
5962-9315608HXC	WS-128K8-25CQ	White Technology Incorporated
5962-9315701HXC	WS-256K8-120CQ	White Technology Incorporated
5962-9315702HXC	WS-256K8-100CQ	White Technology Incorporated
5962-9315703HXC	WS-256K8-85CQ	White Technology Incorporated
5962-9315704HXC	WS-256K8-70CQ	White Technology Incorporated
5962-9315705HXC	WS-256K8-55CQ	White Technology Incorporated
5962-9315706HXC	WS-256K8-45CQ	White Technology Incorporated
5962-9315707HXC	WS-256K8-35CQ	White Technology Incorporated
5962-9315708HXC	WS-256K8-25CQ	White Technology Incorporated
5962-9450601HXX	-----	NO APPROVED SOURCE

CROSS REFERENCE

PRODUCT ELIGIBILITY: The manufacturers listed below have certified that the following Hybrid Microcircuits are built, tested, and shipped using MIL-STD-1772 CERTIFIED FLOW/QUALIFIED MATERIALS and MANUFACTURING TECHNIQUES and are in FULL COMPLIANCE with MIL-H-38534 and MIL-STD-1772 requirements.

TABLE II

1553 BUS CONTROL

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8858501XX	-----	NO APPROVED SOURCE
5962-8858501YX	-----	NO APPROVED SOURCE

1553 BUS/MICROPROCESSOR INTERFACE

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8858601XX	BUS66300II883B	ILC Data Device Corporation
5962-8858601YC	BUS66301III883	ILC Data Device Corporation

1553 SINGLE CHANNEL DRIVER/RECEIVER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8604902TX	BUS63106II	ILC Data Device Corporation
5962-8604902XC	BUS63105	ILC Data Device Corporation
5962-8604902ZX	BUS63105II	ILC Data Device Corporation
5962-8604903YX	ARX2402	Aeroflex Laboratories Incorporated
5962-8604904UX	ARX3402	Aeroflex Laboratories Incorporated
5962-8604905XX	BUS63100-617	ILC Data Device Corporation
5962-8604906TX	-----	NO APPROVED SOURCE
5962-8604906YX	NHI-1509	National Hybrid Incorporated
5962-8604907XX	FC155361	C-MAC Microcircuits Limited
5962-8604908XX	FC155362	C-MAC Microcircuits Limited
5962-8979901XX	FC155391	C-MAC Microcircuits Limited
5962-8979901YX	FC155391FP	C-MAC Microcircuits Limited
5962-8979902XX	FC155392	C-MAC Microcircuits Limited
5962-8979902YX	FC155392FP	C-MAC Microcircuits Limited
5962-9082901TX	FC155371FP	C-MAC Microcircuits Limited
5962-9082901XX	FC155371	C-MAC Microcircuits Limited
5962-9082901YX	FC155371SSW	C-MAC Microcircuits Limited
5962-9082902XX	FC155372	C-MAC Microcircuits Limited
5962-9082903HUX	ARX3420	Aeroflex Laboratories Incorporated
5962-9082904HUX	ARX3424	Aeroflex Laboratories Incorporated

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1553 SINGLE CHANNEL DRIVER/RECEIVER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-9082905TX	NHI-1531FP	National Hybrid Incorporated
5962-9082905YX	NHI-1531	National Hybrid Incorporated
5962-9082906TX	NHI-1545FP	National Hybrid Incorporated
5962-9082906YX	NHI-1545	National Hybrid Incorporated
5962-9082908HXX	CT1589-M	Marconi Circuit Technology Corporation
5962-9082908HYX	CT1589-MI	Marconi Circuit Technology Corporation
5962-9174905HZX	MR3231MP5	Medtronic Incorporated
5962-9174906HZX	MR3232MP2	Medtronic Incorporated
5962-9174907HZX	MR3232MP5	Medtronic Incorporated
5962-9174908HTX	ARX4407LPFP	Aeroflex Laboratories Incorporated
5962-9174908HXX	ARX4407	Aeroflex Laboratories Incorporated
5962-9174908HYX	ARX4407FP	Aeroflex Laboratories Incorporated
5962-9174909HTX	ARX4404LPFP	Aeroflex Laboratories Incorporated
5962-9174909HXX	ARX4404	Aeroflex Laboratories Incorporated
5962-9174909HYX	ARX4404LP	Aeroflex Laboratories Incorporated
5962-9208502XX	ARX4451	Aeroflex Laboratories Incorporated
5962-9208502YX	ARX4451FP	Aeroflex Laboratories Incorporated
5962-9208503XX	ARX4418	Aeroflex Laboratories Incorporated
5962-9208503YX	ARX4418FP	Aeroflex Laboratories Incorporated

1553 DUAL CHANNEL DRIVER/RECEIVER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8757902XX	BUS63125II	ILC Data Device Corporation
5962-8757902YC	BUS63126II	ILC Data Device Corporation
5962-8757903XX	ARX2411	Aeroflex Laboratories Incorporated
5962-8757903YX	ARX2411FP	Aeroflex Laboratories Incorporated
5962-8757904XX	ARX3411	Aeroflex Laboratories Incorporated
5962-8757904YX	ARX3411FP	Aeroflex Laboratories Incorporated
5962-8757905XX	NHI-1500	National Hybrid Incorporated
5962-8757905YX	NHI-1500FP	National Hybrid Incorporated
5962-8757906XX	FC1553623	C-MAC Microcircuits Limited
5962-8757906YX	FC1553623FP	C-MAC Microcircuits Limited
5962-8757907XX	CT1487-D	Marconi Circuit Technology Corporation
5962-8757907YX	CT1487-DFP	Marconi Circuit Technology Corporation
5962-8757908XC	MR63125MPR	Medtronic Incorporated
5962-8944701HUX	ARX3436	Aeroflex Laboratories Incorporated
5962-8944701HXX	ARX3416	Aeroflex Laboratories Incorporated
5962-8944701HYX	ARX3416FP	Aeroflex Laboratories Incorporated
5962-8944701HZX	ARX3436FP	Aeroflex Laboratories Incorporated
5962-8944702XX	NHI-1501	National Hybrid Incorporated
5962-8944702YX	NHI-1501FP	National Hybrid Incorporated
5962-8944703XX	FC1553622	C-MAC Microcircuits Limited
5962-8944703YX	FC1553622FP	C-MAC Microcircuits Limited
5962-8944704HXC	BUS63135II	ILC Data Device Corporation

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1553 DUAL CHANNEL DRIVER/RECEIVER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8944704HYC	BUS63136II	ILC Data Device Corporation
5962-8982601XC	BUS63127II	ILC Data Device Corporation
5962-8982601YC	BUS63128II	ILC Data Device Corporation
5962-8982602XX	ARX3419	Aeroflex Laboratories Incorporated
5962-8982602YX	ARX3419FP	Aeroflex Laboratories Incorporated
5962-8982603XX	NHI-1502	National Hybrid Incorporated
5962-8982603YX	NHI-1502FP	National Hybrid Incorporated
5962-8982604XX	NHI-1523	National Hybrid Incorporated
5962-8982604YX	NHI-1523FP	National Hybrid Incorporated
5962-8982605XX	FC1553721	C-MAC Microcircuits Limited
5962-8982605YX	FC1553721FP	C-MAC Microcircuits Limited
5962-8982606XX	CT1589-D	Marconi Circuit Technology Corporation
5962-8982606YX	CT1589-DFP	Marconi Circuit Technology Corporation
5962-9063601XX	CT1820	Marconi Circuit Technology Corporation
5962-9063602XX	CT1820-2	Marconi Circuit Technology Corporation
5962-9063602YX	CT1820-2FP	Marconi Circuit Technology Corporation
5962-9063603HXX	ARX2410	Aeroflex Laboratories Incorporated
5962-9063604HXX	ARX3410	Aeroflex Laboratories Incorporated
5962-9206101HXX	-----	NO APPROVED SOURCE
5962-9206101HYX	-----	NO APPROVED SOURCE
5962-9206101HZX	-----	NO APPROVED SOURCE
5962-9206102HXX	-----	NO APPROVED SOURCE
5962-9206102HYX	-----	NO APPROVED SOURCE
5962-9206102HZX	-----	NO APPROVED SOURCE
5962-9206103HMX	-----	NO APPROVED SOURCE
5962-9206103HNX	-----	NO APPROVED SOURCE
5962-9206103HTX	-----	NO APPROVED SOURCE
5962-9206103HUX	-----	NO APPROVED SOURCE
5962-9206103HZX	-----	NO APPROVED SOURCE
5962-9206104HMX	-----	NO APPROVED SOURCE
5962-9206104HNX	-----	NO APPROVED SOURCE
5962-9206104HTX	-----	NO APPROVED SOURCE
5962-9206104HUX	-----	NO APPROVED SOURCE
5962-9206104HZX	-----	NO APPROVED SOURCE
5962-9206105HMX	-----	NO APPROVED SOURCE
5962-9206105HNX	-----	NO APPROVED SOURCE
5962-9206105HTX	-----	NO APPROVED SOURCE
5962-9206105HUX	-----	NO APPROVED SOURCE
5962-9206106HMX	-----	NO APPROVED SOURCE
5962-9206106HNX	-----	NO APPROVED SOURCE
5962-9206106HTX	-----	NO APPROVED SOURCE
5962-9206106HUX	-----	NO APPROVED SOURCE

TABLE II

1553 MULTIPLEXER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8869201TX	BUS61563II-601	ILC Data Device Corporation
5962-8869201XA	BUS61553II-140	DDC Ireland Limited
5962-8869201XA	BUS61553II-150	DDC Ireland Limited
5962-8869201XC	BUS61553II-130	DDC Ireland Limited
5962-8869201XC	BUS61553II-883	DDC Ireland Limited
5962-8869201XX	BUS61553-883B	ILC Data Device Corporation
5962-8869201YX	BUS61563-883B	ILC Data Device Corporation
5962-8869201ZX	BUS61563-883B	ILC Data Device Corporation
5962-8869202XA	BUS61554II-140	DDC Ireland Limited
5962-8869202XA	BUS61554II-150	DDC Ireland Limited
5962-8869202XC	BUS61554II-130	DDC Ireland Limited
5962-8869202XC	BUS61554II-883	DDC Ireland Limited
5962-8869202XX	BUS61554-883B	ILC Data Device Corporation
5962-8869202YC	BUS61564-883B	ILC Data Device Corporation
5962-8869202ZX	BUS61564-883B	ILC Data Device Corporation
5962-8869203XC	BUS61555-883B	ILC Data Device Corporation
5962-8869203YC	BUS61565-883B	ILC Data Device Corporation
5962-8869203ZC	BUS61565-883B	ILC Data Device Corporation
5962-8869204XC	BUS61556-883B	ILC Data Device Corporation
5962-9173401HXX	BUS61559	ILC Data Device Corporation
5962-9173401HYX	BUS61569	ILC Data Device Corporation
5962-9173401HZX	BUS61569	ILC Data Device Corporation
5962-9173402HXX	BUS61560	ILC Data Device Corporation
5962-9173402HYX	BUS61570	ILC Data Device Corporation
5962-9173402HZX	BUS61570	ILC Data Device Corporation
5962-9173403HXX	BUS61561	ILC Data Device Corporation
5962-9173403HYX	BUS61571	ILC Data Device Corporation
5962-9173403HZX	BUS61571	ILC Data Device Corporation
5962-9173404HXX	BUS61559-601	ILC Data Device Corporation
5962-9173404HYX	BUS61569-601	ILC Data Device Corporation
5962-9173404HZX	BUS61569-601	ILC Data Device Corporation

1553 REMOTE TERMINAL UNIT

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8753501XA	BUS65112	ILC Data Device Corporation
5962-8753501YC	BUS65117	ILC Data Device Corporation
5962-8753502XX	ARX2452	Aeroflex Laboratories Incorporated
5962-8753502YX	ARX2452FP	Aeroflex Laboratories Incorporated
5962-8763201XX	-----	NO APPROVED SOURCE
5962-8979801XX	BUS-65142	ILC Data Device Corporation
5962-8979801YX	BUS-65144	ILC Data Device Corporation
5962-8979802XX	BUS-65143-883B	ILC Data Device Corporation
5962-8979802YX	BUS-65145-883B	ILC Data Device Corporation
5962-9168701HXX	NHI-1553RT	National Hybrid Incorporated

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1553 REMOTE TERMINAL UNIT

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-9168701HYX	NHI-1553RTPF	National Hybrid Incorporated
5962-9168702HXX	NHI-1554RT	National Hybrid Incorporated
5962-9168702HYX	NHI-1554RTPF	National Hybrid Incorporated
5962-9306501HXX	BU-65170D1	ILC Data Device Corporation
5962-9306501HYX	BU-65170F1	ILC Data Device Corporation
5962-9306501HZX	BU-65170J1	ILC Data Device Corporation
5962-9306502HXX	BU-65170D2	ILC Data Device Corporation
5962-9306502HYX	BU-65170F2	ILC Data Device Corporation
5962-9306502HZX	BU-65170J2	ILC Data Device Corporation
5962-9306503HXX	BU-61580D1	ILC Data Device Corporation
5962-9306503HYX	BU-61580F1	ILC Data Device Corporation
5962-9306503HZX	BU-61580J1	ILC Data Device Corporation
5962-9306504HXX	BU-61580D2	ILC Data Device Corporation
5962-9306504HYX	BU-61580F2	ILC Data Device Corporation
5962-9306504HZX	BU-61580J2	ILC Data Device Corporation
5962-9306505HXX	BU-65171D1	ILC Data Device Corporation
5962-9306505HYX	BU-65171F1	ILC Data Device Corporation
5962-9306505HZX	BU-65171J1	ILC Data Device Corporation
5962-9306506HXX	BU-65171D2	ILC Data Device Corporation
5962-9306506HYX	BU-65171F2	ILC Data Device Corporation
5962-9306506HZX	BU-65171J2	ILC Data Device Corporation
5962-9306507HXX	BU-61581D1	ILC Data Device Corporation
5962-9306507HYX	BU-61581F1	ILC Data Device Corporation
5962-9306507HZX	BU-61581J1	ILC Data Device Corporation
5962-9306508HXX	BU-61581D2	ILC Data Device Corporation
5962-9306508HYX	BU-61581F2	ILC Data Device Corporation
5962-9306508HZX	BU-61581J2	ILC Data Device Corporation

1553 TRANSCEIVER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8952202XX	ARX-2453	Aeroflex Laboratories Incorporated
5962-8952202YX	ARX-2453FP	Aeroflex Laboratories Incorporated
5962-8952203XX	NHI-1529	National Hybrid Incorporated
5962-8952203YX	NHI-1529FP	National Hybrid Incorporated
5962-8952206XX	FC1553921	C-MAC Microcircuits Limited
5962-8952206YX	FC1553921FP	C-MAC Microcircuits Limited
5962-8952207XX	FC1553923	C-MAC Microcircuits Limited
5962-8952207YX	FC1553923	C-MAC Microcircuits Limited
5962-8952208XX	ARX-3453	Aeroflex Laboratories Incorporated
5962-8952208YX	ARX-3453FP	Aeroflex Laboratories Incorporated

TABLE II

AMPLIFIER, CURRENT

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
7801301GX 7801301XX 7801301XX	CTS0002XB CTS0002 ELH0002H/883B	CTS Corporation CTS Corporation Elantec Incorporated

AMPLIFIER, TRACK AND HOLD

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-9063001HXX 5962-9073001HXX 5962-9073001YX	SP9760B MN376H/B HTC-0300AM/883	Sipex Corporation Micronetworks Corporation Analog Devices Incorporated

ANALOG/DIGITAL CONVERTER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8850801XX	ADC-HX/883B	Datel Incorporated
5962-8850802XX	ADC-HZ/883B	Datel Incorporated
5962-8850802XX	MNADC87H/B	Micronetworks Corporation
5962-8865801XX	AD578X	Analog Devices Incorporated
5962-8865802XX	AD578T	Analog Devices Incorporated
5962-8865803XX	AD578ZSD	Analog Devices Incorporated
5962-8865804XX	AD578ZTD	Analog Devices Incorporated
5962-8877601XX	HS1068B	Sipex Corporation
5962-8956301HXX	MN5290H/B	Micronetworks Corporation
5962-8956302HXX	MN5291H/B	Micronetworks Corporation
5962-8956901HXX	MN5295H/B	Micronetworks Corporation
5962-8958301YX	MN5200H/B	Micronetworks Corporation
5962-8958302YX	MN5203H/B	Micronetworks Corporation
5962-8958303YX	MN5201H/B	Micronetworks Corporation
5962-8958304YX	MN5204H/B	Micronetworks Corporation
5962-8958305YX	MN5202H/B	Micronetworks Corporation
5962-8958306YX	MN5205H/B	Micronetworks Corporation
5962-8958307YX	MN5206H/B	Micronetworks Corporation
5962-8958401YX	MN5210H/B	Micronetworks Corporation
5962-8958402YX	MN5213H/B	Micronetworks Corporation
5962-8958403YX	MN5211H/B	Micronetworks Corporation
5962-8958404YX	MN5214H/B	Micronetworks Corporation
5962-8958405YX	MN5212H/B	Micronetworks Corporation
5962-8958406YX	MN5215H/B	Micronetworks Corporation
5962-8958407YX	MN5216H/B	Micronetworks Corporation
5962-8959501XX	MN5245H/B	Micronetworks Corporation
5962-8959502XX	MN5245AH/B	Micronetworks Corporation

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ANALOG/DIGITAL CONVERTER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8959503XX	MN5246H/B	Micronetworks Corporation
5962-8959504XX	MN5246AH/B	Micronetworks Corporation
5962-8997901XX	SP1078B	Sipex Corporation
5962-9063101HXX	SP9588	Sipex Corporation
5962-9066601HXX	AD9005ATM/883B	Analog Devices Incorporated
5962-9079501HXX	HS9576S/B	Sipex Corporation
5962-9079502HXX	HS9576T/B	Sipex Corporation
5962-9099501HXX	CLC925B8C	Comlinear Corporation
5962-9171201HXX	AD1385TD/883B	Analog Devices Incorporated

BUS INTERFACE UNIT

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-9216201HXX	BUS65153	ILC Data Device Corporation
5962-9216201HYX	BUS65163	ILC Data Device Corporation
5962-9216202HXX	BUS65154	ILC Data Device Corporation
5962-9216202HYX	BUS65164	ILC Data Device Corporation

DATA ACQUISITION SYSTEM

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8851401XX	HS9403B-8	Sipex Corporation
5962-8851402XX	HS9403B-16	Sipex Corporation
5962-9079701HXX	MN7140H/B	Micronetworks Corporation

DC/DC CONVERTER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8968301HXX	AHE2805S/CH	Advanced Analog Incorporated
5962-8968301HZX	AHE2805SF/CH	Advanced Analog Incorporated
5962-8968302HXX	AHE2805S/CHSLV	Advanced Analog Incorporated
5962-8968302HZX	AHE2805SFCHSLV	Advanced Analog Incorporated
5962-8968303HXX	AHE2805S/CHMST	Advanced Analog Incorporated
5962-8968303HZX	AHE2805SFCHMST	Advanced Analog Incorporated
5962-9095401HXX	ATO2815T/CH	Advanced Analog Incorporated
5962-9095401HZX	ATO2815TF/CH	Advanced Analog Incorporated
5962-9157501HXX	AHE2815D/CH	Advanced Analog Incorporated

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DC/DC CONVERTER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-9157501HZX	AHE2815DF/CH	Advanced Analog Incorporated
5962-9157502HXX	AHE2815D/CHSLV	Advanced Analog Incorporated
5962-9157502HZX	AHE2815DFCHSLV	Advanced Analog Incorporated
5962-9157503HXX	AHE2815DCHMSTR	Advanced Analog Incorporated
5962-9157503HZX	AHE2815DFCHMST	Advanced Analog Incorporated
5962-9157901HZX	ATW2805SCH	Advanced Analog Incorporated
5962-9157902HZX	ATW2805SCH-SLV	Advanced Analog Incorporated
5962-9157903HZX	ATW2805SCHMSTR	Advanced Analog Incorporated
5962-9158001HXX	AHE2812S/CH	Advanced Analog Incorporated
5962-9158001HZX	AHE2812SF/CH	Advanced Analog Incorporated
5962-9158002HXX	AHE2812S/CHSLV	Advanced Analog Incorporated
5962-9158002HZX	AHE2812SFCHSLV	Advanced Analog Incorporated
5962-9158003HXX	AHE2812SCHMSTR	Advanced Analog Incorporated
5962-9158003HZX	AHE2812SFCHMST	Advanced Analog Incorporated
5962-9160001HXX	AHF2805S/CH	Advanced Analog Incorporated
5962-9160101HXX	MHF-2815S/883	Interpoint Corporation
5962-9160201HXX	ATO2812T/CH	Advanced Analog Incorporated
5962-9160201HZX	ATO2812TF/CH	Advanced Analog Incorporated
5962-9161301HZX	ATW2815D/CH	Advanced Analog Incorporated
5962-9161302HZX	ATW2815D/CHSLV	Advanced Analog Incorporated
5962-9161303HZX	ATW2815DCHMSTR	Advanced Analog Incorporated
5962-9161401HXX	MHF-2815D/883	Interpoint Corporation
5962-9162501HXX	AHE2815S/CH	Advanced Analog Incorporated
5962-9162501HZX	AHE2815SF/CH	Advanced Analog Incorporated
5962-9162502HXX	AHE2815S/CHSLV	Advanced Analog Incorporated
5962-9162502HZX	AHE2815SF/CHSL	Advanced Analog Incorporated
5962-9162503HXX	AHE2815SCHMST	Advanced Analog Incorporated
5962-9162503HZX	AHE2815SFCHMS	Advanced Analog Incorporated
5962-9166401HXX	MHF-2815S/883	Interpoint Corporation
5962-9204001HXX	AHE2812D/CH	Advanced Analog Incorporated
5962-9204001HZX	AHE2812DF/CH	Advanced Analog Incorporated
5962-9204002HXX	AHE2812D/CHSLV	Advanced Analog Incorporated
5962-9204002HZX	AHE2812DFCHSLV	Advanced Analog Incorporated
5962-9204003HXX	AHE2812DCHMSTR	Advanced Analog Incorporated
5962-9204003HZX	AHE2812DFCHMST	Advanced Analog Incorporated
5962-9210901HZX	ATW2812D/CH	Advanced Analog Incorporated
5962-9210902HZX	ATW2812D/CHSLV	Advanced Analog Incorporated
5962-9210903HZX	ATW2812CHMSTR	Advanced Analog Incorporated
5962-9213901HXX	MHF-2805S/883	Interpoint Corporation
5962-9214401HXX	MHF-2812D/883	Interpoint Corporation
5962-9235101HXX	AHF2815D/CH	Advanced Analog Incorporated
5962-9308901HXX	MSA2812D/883	Interpoint Corporation
5962-9309001HXX	MSA2815D/883	Interpoint Corporation
5962-9309201HXX	MSA2805S/883	Interpoint Corporation
5962-9309301HXX	MSA2812S/883	Interpoint Corporation
5962-9309401HXX	MSA2815S/883	Interpoint Corporation

DIGITAL/ANALOG CONVERTER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8768801XX	MN3008H/B	Micronetworks Corporation
5962-8768802XX	MN3009H/B	Micronetworks Corporation
5962-8850901XX	AD390S	Analog Devices Incorporated
5962-8850902XX	AD390T	Analog Devices Incorporated
5962-8851001XX	AD394S	Analog Devices Incorporated
5962-8851002XX	AD394T	Analog Devices Incorporated
5962-8851701XX	DAC02310-112	ILC Data Device Corporation
5962-8851701YX	DAC02311-112	ILC Data Device Corporation
5962-8851702XX	DAC02310-113	ILC Data Device Corporation
5962-8851702YX	DAC02311-113	ILC Data Device Corporation
5962-8854201XX	ADC00300-112	ILC Data Device Corporation
5962-8854201YX	ADC00302-112	ILC Data Device Corporation
5962-8862901XX	-----	NO APPROVED SOURCE
5962-8950901XX	RGBDAC3808H/B	Advanced Analog Incorporated
5962-8952801XX	DAC HKB/883B	Datel Incorporated
5962-8952802XX	DAC HKB-2/883B	Datel Incorporated
5962-8953101XX	DAC HPB/883B	Datel Incorporated
5962-8953102HYX	MN3292T/B-V	Micronetworks Corporation
5962-8953102XX	DAC HPB-1/883B	Datel Incorporated
5962-8953103HYX	MN3290T/B-V	Micronetworks Corporation
5962-8953104HYX	MN3291T/B-V	Micronetworks Corporation
5962-8971801XX	MN3020H/B	Micronetworks Corporation
5962-8971801XX	HS3020B	Sipex Corporation
5962-8986201XC	HS9378T/S	Sipex Corporation
5962-8986202XC	HS9378S/B	Sipex Corporation
5962-9057001HXX	MN3860H/B	Micronetworks Corporation
5962-9063401HXX	ADH030-II12-1	ILC Data Device Corporation
8300201JX	DAC87	Analog Devices Incorporated

DIGITAL TO SYNCHRO/RESOLVER CONVERTERS

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8998601HXX	DSC11520-112	ILC Data Device Corporation
5962-8998602HXX	DSC11520-113	ILC Data Device Corporation
5962-8998603HXX	DSC11520-114	ILC Data Device Corporation
5962-8998604HXX	DSC11520-115	ILC Data Device Corporation
5962-9155901HXX	HDSR2056P-34VR/2	Natel Engineering Corporation
5962-9155902HXX	HDSR2056P-34VS/2	Natel Engineering Corporation
5962-9155903HXX	HDSR2056P-34H/2	Natel Engineering Corporation
5962-9155904HXX	HDSR2056P-34S/2	Natel Engineering Corporation

TABLE II

DRIVER, HIGH VOLTAGE

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8761701XX 5962-8761702XX	CTS00061B CTS00081B	CTS Corporation CTS Corporation

DRIVER/RECEIVER, UNIVERSAL

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8959201XX 5962-8959201YX 5962-8959202XX 5962-8959202YX 5962-8959203XX 5962-8959203YX 5962-8959204XX 5962-8959204YX 5962-8959205XX 5962-8959205YX 5962-8959206XX 5962-8959206YX	ARX3407 ARX3407FP ARX3404 ARX3404FP ARX3407-001 ARX3407-001FP ARX3404-001 ARX3404-001FP ARX3467 ARX3467FP ARX3464 ARX3464FP	Aeroflex Laboratories Incorporated Aeroflex Laboratories Incorporated Aeroflex Laboratories Incorporated Aeroflex Laboratories Incorporated Aeroflex Laboratories Incorporated Aeroflex Laboratories Incorporated Aeroflex Laboratories Incorporated Aeroflex Laboratories Incorporated Aeroflex Laboratories Incorporated Aeroflex Laboratories Incorporated Aeroflex Laboratories Incorporated Aeroflex Laboratories Incorporated

FILTER, EMI

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
9102001HXX 9102001HZX	AFC-461/CH AFC-461F/CH	Advanced Analog Incorporated Advanced Analog Incorporated

MEMORIES

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-9207801HXC 5962-9207802HXC 5962-9207803HXC 5962-9207804HXC 5962-9207805HXC 5962-9207806HXC 5962-9207807HXC 5962-9207808HXC 5962-9309101HXC	WS-512K8-120CQ WS-512K8-100CQ WS-512K8-85CQ WS-512K8-70CQ WS-512K8-55CQ WS-512K8-45CQ WS-512K8-35CQ WS-512K8-25CQ WE-512K8-150CQ	White Technology Incorporated White Technology Incorporated White Technology Incorporated White Technology Incorporated White Technology Incorporated White Technology Incorporated White Technology Incorporated White Technology Incorporated White Technology Incorporated

TABLE II

MEMORIES

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-9309102HXC	WE-512K8-300CQ	White Technology Incorporated
5962-9309103HXC	WE-512K8-250CQ	White Technology Incorporated
5962-9309104HXC	WE-512K8-200CQ	White Technology Incorporated
5962-9315401HXC	WE-128K8-200CQ	White Technology Incorporated
5962-9315402HXC	WE-128K8-150CQ	White Technology Incorporated
5962-9315501HXC	WE-256K8-200CQ	White Technology Incorporated
5962-9315502HXC	WE-256K8-150CQ	White Technology Incorporated
5962-9315601HXC	WS-128K8-120CQ	White Technology Incorporated
5962-9315602HXC	WS-128K8-100CQ	White Technology Incorporated
5962-9315603HXC	WS-128K8-85CQ	White Technology Incorporated
5962-9315604HXC	WS-128K8-70CQ	White Technology Incorporated
5962-9315605HXC	WS-128K8-55CQ	White Technology Incorporated
5962-9315606HXC	WS-128K8-45CQ	White Technology Incorporated
5962-9315607HXC	WS-128K8-35CQ	White Technology Incorporated
5962-9315608HXC	WS-128K8-25CQ	White Technology Incorporated
5962-9315701HXC	WS-256K8-120CQ	White Technology Incorporated
5962-9315702HXC	WS-256K8-100CQ	White Technology Incorporated
5962-9315703HXC	WS-256K8-85CQ	White Technology Incorporated
5962-9315704HXC	WS-256K8-70CQ	White Technology Incorporated
5962-9315705HXC	WS-256K8-55CQ	White Technology Incorporated
5962-9315706HXC	WS-256K8-45CQ	White Technology Incorporated
5962-9315707HXC	WS-256K8-35CQ	White Technology Incorporated
5962-9315708HXC	WS-256K8-25CQ	White Technology Incorporated

MULTIPLEXER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-9450601HXX	-----	NO APPROVED SOURCE

OPERATIONAL AMPLIFIER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
8001301ZX	CTS0032ZB	CTS Corporation
8001301ZX	ELH0032G/883B	Elantec Incorporated

TABLE II

OPERATIONAL AMPLIFIER, POWER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8762001XX	MIOP42106/883	Micropac Industries Incorporated
5962-8762002HXX	PA51M/883	Apex Microtechnology Incorporated
5962-8870101YX	OMA541SDB	Omnirel Corporation
5962-9063801HXX	PA07M/883	Apex Microtechnology Incorporated
5962-9063801HXX	MIOP42114/883	Micropac Industries Incorporated
5962-9065901HXX	PA12M/883	Apex Microtechnology Incorporated
5962-9065901HXX	MIOP42109/883	Micropac Industries Incorporated
5962-9067901HXX	PA02M/883	Apex Microtechnology Incorporated
5962-9067901HXX	MIOP42120/883	Micropac Industries Incorporated
5962-9072301HXX	PA08M/883	Apex Microtechnology Incorporated
5962-9072301HXX	MIOP42116/883	Micropac Industries Incorporated
5962-9073601HXX	PA84M/883	Apex Microtechnology Incorporated
5962-9082801HXX	PA10M/883	Apex Microtechnology Incorporated
5962-9082801HXX	MIOP42115/883	Micropac Industries Incorporated
5962-9162101HXX	PA83M/883	Apex Microtechnology Incorporated
5962-9170001HXX	PA09M/883	Apex Microtechnology Incorporated
5962-9170001HXX	MIOP42119/883	Micropac Industries Incorporated
8508701ZX	CTS0041ZB	CTS Corporation
8508701ZX	ELH0041G/883B	Elantec Incorporated
8508801YX	CTS0021ZB	CTS Corporation
8508801YX	ELH0021K/883B	Elantec Incorporated

OPERATIONAL AMPLIFIER, VIDEO

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8857901XC	HOS-050A	Analog Devices Incorporated
5962-8857901XX	-----	NO APPROVED SOURCE
5962-8857902XC	HOS-060SH	Analog Devices Incorporated
5962-8857902XX	-----	NO APPROVED SOURCE

OPERATIONAL AMPLIFIER, WIDEBAND

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8959401XX	CLC231A8C	Comlinear Corporation
5962-89813013X	-----	NO APPROVED SOURCE
5962-8981301GX	-----	NO APPROVED SOURCE
5962-8985801XX	CLC206A8C	Comlinear Corporation
5962-8991001XX	CLC200A8C	Comlinear Corporation
5962-8991101XX	CLC220A8C	Comlinear Corporation
5962-9083301HXX	CLC201A8C	Comlinear Corporation
5962-9083501HXX	CLC205A8C	Comlinear Corporation

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OPERATIONAL AMPLIFIER, WIDEBAND

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-9083601HXX	CLC221A8C	Comlinear Corporation
5962-9097701HXX	CLC207A8C	Comlinear Corporation
5962-9166501HXX	CLC232A8C	Comlinear Corporation
8508901YX	ELH0101AK/883B	Elantec Incorporated
8508902YX	ELH0101K/883B	Elantec Incorporated

OPTOCOUPLER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8767901EX	4N55/883B	Hewlett-Packard Company
5962-8767901EX	4N55/883B	Micropac Industries Incorporated
5962-8767901TX	4N55/883B#300	Hewlett-Packard Company
5962-8767901UX	4N55/883B#100	Hewlett-Packard Company
5962-8767902PX	HCPL-5531	Hewlett-Packard Company
5962-8767902PX	66126-103	Micropac Industries Incorporated
5962-8767902XX	HCPL-5531#300	Hewlett-Packard Company
5962-8767902YX	HCPL-5531#100	Hewlett-Packard Company
5962-87679032A	HCPL-6531	Hewlett-Packard Company
5962-8876801PX	HCPL-5201	Hewlett-Packard Company
5962-8876801XX	-----	NO APPROVED SOURCE
5962-8876801YX	-----	NO APPROVED SOURCE
5962-8876901PX	HCPL-5231	Hewlett-Packard Company
5962-8876901XX	HCPL-5231#300	Hewlett-Packard Company
5962-8876901YX	HCPL-5231#100	Hewlett-Packard Company
5962-88769022X	HCPL-6231	Hewlett-Packard Company
5962-8947701PX	HCPL-5761	Hewlett-Packard Company
5962-8947701XX	HCPL-5761#300	Hewlett-Packard Company
5962-8947701YX	HCPL-5761#100	Hewlett-Packard Company
5962-8957001PX	HCPL-5401	Hewlett-Packard Company
5962-8957001XX	HCPL-5401#300	Hewlett-Packard Company
5962-8957001YX	HCPL-5401#100	Hewlett-Packard Company
5962-8957101PX	HCPL-5431	Hewlett-Packard Company
5962-8957101XX	HCPL-5431#300	Hewlett-Packard Company
5962-8957101YX	HCPL-5431#100	Hewlett-Packard Company
5962-89571022X	HCPL-6431	Hewlett-Packard Company
5962-8957201EX	HCPL-1931	Hewlett-Packard Company
5962-8978501PX	HCPL-5731	Hewlett-Packard Company
5962-8978501PX	66058-003	Micropac Industries Incorporated
5962-8978501XX	66071-001	Micropac Industries Incorporated
5962-8978501YX	HCPL-5731#100	Hewlett-Packard Company
5962-8978501ZX	HCPL-5731#300	Hewlett-Packard Company
5962-89785022X	HCPL-6731	Hewlett-Packard Company
5962-89785022X	66124-001	Micropac Industries Incorporated
5962-89785032X	66125-001	Micropac Industries Incorporated
5962-8981001PX	HCPL-5701	Hewlett-Packard Company

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OPTOCOUPLER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8981001PX	66058-105	Micropac Industries Incorporated
5962-8981001XX	-----	NO APPROVED SOURCE
5962-8981001YX	-----	NO APPROVED SOURCE
5962-9085401HPX	HCPL-5501	Hewlett-Packard Company
5962-9085401HPX	66126-105	Micropac Industries Incorporated
5962-9085501HPX	HCPL-5601	Hewlett-Packard Company
5962-9085501HXX	-----	NO APPROVED SOURCE
5962-9085501HYX	-----	NO APPROVED SOURCE
5962-9167601HPX	66079-001	Micropac Industries Incorporated
5962-9314001HPX	HSSR-7111	Hewlett-Packard Company
5962-9314001HXX	HSSR-7111#300	Hewlett-Packard Company
5962-9314001HYX	HSSR-7111#200	Hewlett-Packard Company
8102801EX	6N134/883B	Hewlett-Packard Company
8102801EX	66013-001	Micropac Industries Incorporated
8102801TX	6N134/883B#300	Hewlett-Packard Company
8102801UX	6N134/883B#100	Hewlett-Packard Company
8102801XX	66072-001/883B	Micropac Industries Incorporated
8102802PX	HCPL-5631	Hewlett-Packard Company
8102802PX	66056-103	Micropac Industries Incorporated
8102802YX	HCPL-5631#100	Hewlett-Packard Company
8102802ZX	HCPL-5631#300	Hewlett-Packard Company
81028032X	HCPL-6631	Hewlett-Packard Company
81028032X	66123-001	Micropac Industries Incorporated
8302401EX	6N140A/883B	Hewlett-Packard Company
8302401EX	6N140/883B	Micropac Industries Incorporated

R/D CONVERTER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8990801XX	SDC14565III114	ILC Data Device Corporation
5962-8990801YX	SDC14565-629	ILC Data Device Corporation
5962-8990801ZX	SDC14565-621	ILC Data Device Corporation
5962-8990802XX	SDC14565III115	ILC Data Device Corporation
5962-8990802YX	SDC14565-630	ILC Data Device Corporation
5962-8990802ZX	SDC14565-622	ILC Data Device Corporation
5962-8990803XC	SDC14565-616	ILC Data Device Corporation
5962-8990803ZC	SDC14565-616C	ILC Data Device Corporation
5962-8990804XX	SDC14565III115	ILC Data Device Corporation
5962-8990804YX	SDC14566-609	ILC Data Device Corporation
5962-8990804ZX	SDC14566-608	ILC Data Device Corporation
5962-8990805XX	SDC14565-618	ILC Data Device Corporation
5962-8990805ZX	SDC14565-618C	ILC Data Device Corporation
5962-8990806XX	HRD1066-341H/2	Natel Engineering Corporation
5962-8990807XX	HRD1066-381V/2	Natel Engineering Corporation
5962-8990808XX	HRD1066-381H/2	Natel Engineering Corporation

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R/D CONVERTER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-9055101XC	SDC14567III111	ILC Data Device Corporation
5962-9055101XX	-----	NO APPROVED SOURCE
5962-9055101YX	-----	NO APPROVED SOURCE
5962-9055102XC	SDC14567III112	ILC Data Device Corporation
5962-9055102XX	-----	NO APPROVED SOURCE
5962-9055102YX	-----	NO APPROVED SOURCE
5962-9055103XC	SDC14567III114	ILC Data Device Corporation
5962-9055103XX	-----	NO APPROVED SOURCE
5962-9055103YX	-----	NO APPROVED SOURCE
5962-9055104XC	SDC14567III115	ILC Data Device Corporation
5962-9055104XX	-----	NO APPROVED SOURCE
5962-9055104YX	-----	NO APPROVED SOURCE
5962-9055105XC	SDC14569III111	ILC Data Device Corporation
5962-9055105XX	-----	NO APPROVED SOURCE
5962-9055105ZX	-----	NO APPROVED SOURCE
5962-9055106XC	SDC14569III112	ILC Data Device Corporation
5962-9055106XX	-----	NO APPROVED SOURCE
5962-9055106YX	-----	NO APPROVED SOURCE
5962-9055107XC	SDC14569III114	ILC Data Device Corporation
5962-9055107XX	-----	NO APPROVED SOURCE
5962-9055107YX	-----	NO APPROVED SOURCE
5962-9055108XC	SDC14569III115	ILC Data Device Corporation
5962-9055108XX	-----	NO APPROVED SOURCE
5962-9055108YX	-----	NO APPROVED SOURCE
5962-9205001HXX	SDC14573-112	ILC Data Device Corporation
5962-9205002HXX	SDC14578-112	ILC Data Device Corporation
5962-9205003HXX	SDC14578-114	ILC Data Device Corporation
5962-9205201HXX	SDC14603-112	ILC Data Device Corporation
5962-9205202HXX	SDC14603T-112	ILC Data Device Corporation
5962-9205203HXX	SDC14608-112	ILC Data Device Corporation
5962-9205204HXX	SDC14608T-112	ILC Data Device Corporation
5962-9205205HXX	SDC14608-114	ILC Data Device Corporation
5962-9205206HXX	SDC14608T-114	ILC Data Device Corporation
5962-9205501HXX	SDC14613-112	ILC Data Device Corporation
5962-9205502HXX	SDC14613T-112	ILC Data Device Corporation
5962-9205503HXX	SDC14618-112	ILC Data Device Corporation
5962-9205504HXX	SDC14618T-112	ILC Data Device Corporation
5962-9205505HXX	SDC14618-114	ILC Data Device Corporation
5962-9205506HXX	SDC14618T-114	ILC Data Device Corporation

R/S TO DIGITAL CONVERTER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8768701XC	HSDC8920A883B	ILC Data Device Corporation
5962-8768701YX	RDC14505-638C	ILC Data Device Corporation

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R/S TO DIGITAL CONVERTER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8768702XC	RDC14505-639	ILC Data Device Corporation
5962-8768702YX	RDC14505-639C	ILC Data Device Corporation
5962-8768703XC	RDC14505-641	ILC Data Device Corporation
5962-8768703YX	RDC14505-641C	ILC Data Device Corporation
5962-9055401XC	HSDC8915A883B	ILC Data Device Corporation
5962-9055401XX	XDC14507-628	ILC Data Device Corporation
5962-9055401YX	XDC14507-628	ILC Data Device Corporation
5962-9055402XC	HSDC8915883B	ILC Data Device Corporation
5962-9055402XX	XDC14507-627	ILC Data Device Corporation
5962-9055402YX	XDC14507-627	ILC Data Device Corporation
5962-9082001HXC	SDC14531-690	ILC Data Device Corporation
5962-9082002HXC	SDC14531-631	ILC Data Device Corporation
5962-9173601HXX	SDC14600-112	ILC Data Device Corporation
5962-9173602HXX	SDC14600T-112	ILC Data Device Corporation
5962-9173603HXX	SDC14601-112	ILC Data Device Corporation
5962-9173604HXX	SDC14601T-112	ILC Data Device Corporation
5962-9173605HXX	SDC14605-112	ILC Data Device Corporation
5962-9173606HXX	SDC14605T-112	ILC Data Device Corporation
5962-9173607HXX	SDC14606-112	ILC Data Device Corporation
5962-9173608HXX	SDC14606T-112	ILC Data Device Corporation
5962-9173609HXX	SDC14605-114	ILC Data Device Corporation
5962-9173610HXX	SDC14605T-112	ILC Data Device Corporation
5962-9173611HXX	SDC14606-114	ILC Data Device Corporation
5962-9173612HXX	SDC14606T-112	ILC Data Device Corporation
5962-9204801HXX	SDC14570-112	ILC Data Device Corporation
5962-9204802HXX	SDC14571-112	ILC Data Device Corporation
5962-9204803HXX	SDC14575-112	ILC Data Device Corporation
5962-9204804HXX	SDC14576-112	ILC Data Device Corporation
5962-9204805HXX	SDC14575-114	ILC Data Device Corporation
5962-9204806HXX	SDC14576-114	ILC Data Device Corporation
5962-9204901HXX	SDC14572-112	ILC Data Device Corporation
5962-9204902HXX	SDC14574-112	ILC Data Device Corporation
5962-9204903HXX	SDC14577-112	ILC Data Device Corporation
5962-9204904HXX	SDC14579-112	ILC Data Device Corporation
5962-9204905HXX	SDC14577-114	ILC Data Device Corporation
5962-9204906HXX	SDC14579-114	ILC Data Device Corporation
5962-9205101HXX	SDC14602-112	ILC Data Device Corporation
5962-9205102HXX	SDC14602T-112	ILC Data Device Corporation
5962-9205103HXX	SDC14604-112	ILC Data Device Corporation
5962-9205104HXX	SDC14604T-112	ILC Data Device Corporation
5962-9205105HXX	SDC14607-112	ILC Data Device Corporation
5962-9205106HXX	SDC14607T-112	ILC Data Device Corporation
5962-9205107HXX	SDC14609-112	ILC Data Device Corporation
5962-9205108HXX	SDC14609T-112	ILC Data Device Corporation
5962-9205109HXX	SDC14607-114	ILC Data Device Corporation
5962-9205110HXX	SDC14607T-114	ILC Data Device Corporation
5962-9205111HXX	SDC14609-114	ILC Data Device Corporation
5962-9205112HXX	SDC14609T-114	ILC Data Device Corporation
5962-9205301HXX	SDC14610-112	ILC Data Device Corporation

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HYBRID MICROCIRCUITS

QML-38534-17

TABLE II

R/S TO DIGITAL CONVERTER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-9205302HXX	SDC14610T-112	ILC Data Device Corporation
5962-9205303HXX	SDC14611-112	ILC Data Device Corporation
5962-9205304HXX	SDC14611T-112	ILC Data Device Corporation
5962-9205305HXX	SDC14615-112	ILC Data Device Corporation
5962-9205306HXX	SDC14615T-112	ILC Data Device Corporation
5962-9205307HXX	SDC14616-112	ILC Data Device Corporation
5962-9205308HXX	SDC14616T-112	ILC Data Device Corporation
5962-9205309HXX	SDC14615-114	ILC Data Device Corporation
5962-9205310HXX	SDC14615T-114	ILC Data Device Corporation
5962-9205311HXX	SDC14616-114	ILC Data Device Corporation
5962-9205312HXX	SDC14616T-114	ILC Data Device Corporation

REFERENCE, PRECISION VOLTAGE

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
85030013X	-----	NO APPROVED SOURCE
8503001CX	HS2700SD/883B	Sipex Corporation
8503001YX	2700SD	Analog Devices Incorporated
8503001YX	HC2700SD/883B	Hycomp Incorporated
85030023X	-----	NO APPROVED SOURCE
8503002CX	HS2700UD/883B	Sipex Corporation
8503002YX	2700UD	Analog Devices Incorporated
8503002YX	HC2700UD/883B	Hycomp Incorporated
85030033X	-----	NO APPROVED SOURCE
8503003CX	HS2702SD/883B	Sipex Corporation
8503003YX	2701SD	Analog Devices Incorporated
8503003YX	HC2702SD/883B	Hycomp Incorporated
85030043X	-----	NO APPROVED SOURCE
8503004CX	HS2702UD/883B	Sipex Corporation
8503004YX	2702SD	Analog Devices Incorporated
8503004YX	HC2702UD/883B	Hycomp Incorporated
85030053X	-----	NO APPROVED SOURCE
8503005CX	HS2701SD/883B	Sipex Corporation
8503005YX	2702UD	Analog Devices Incorporated
8503005YX	HC2701SD/883B	Hycomp Incorporated
85030063X	-----	NO APPROVED SOURCE
8503006CX	HS2701UD/883B	Sipex Corporation
8503006YX	2701UD	Analog Devices Incorporated
8503006YX	HC2701UD/883B	Hycomp Incorporated

TABLE II

S/D CONVERTER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8949801XX	SDC14561III114	ILC Data Device Corporation
5962-8949801YX	-----	NO APPROVED SOURCE
5962-8949802XX	SDC14561III115	ILC Data Device Corporation
5962-8949802YX	-----	NO APPROVED SOURCE
5962-8949803XX	-----	NO APPROVED SOURCE
5962-8949804XX	-----	NO APPROVED SOURCE
5962-8949805XX	-----	NO APPROVED SOURCE
5962-8949805YX	-----	NO APPROVED SOURCE
5962-8949901XX	SDC14560III1-607	ILC Data Device Corporation
5962-8949901YX	-----	NO APPROVED SOURCE
5962-8949902XX	SDC14560III1-608	ILC Data Device Corporation
5962-8949902YX	-----	NO APPROVED SOURCE
5962-8949903XC	SDC14560III605	ILC Data Device Corporation
5962-8949903XX	-----	NO APPROVED SOURCE
5962-8949903YX	-----	NO APPROVED SOURCE
5962-8949904XX	HSD1066-341H/2	Natel Engineering Corporation
5962-8949905XX	HSD1066-341V/2	Natel Engineering Corporation
5962-8949906XX	HSD1066-C778H/2	Natel Engineering Corporation
5962-9070701HXC	SDC14500-635	ILC Data Device Corporation
5962-9070701HXX	SDC14500-635	ILC Data Device Corporation
5962-9070701HYX	HSDC-8917II-1-A	ILC Data Device Corporation
5962-9070702HXC	SDC14500-636	ILC Data Device Corporation
5962-9070702HXX	SDC14500-636	ILC Data Device Corporation
5962-9070702HYX	HSDC-8917II-1	ILC Data Device Corporation
5962-9070703HXC	SDC14502-605	ILC Data Device Corporation
5962-9070703HXX	SDC14502-605	ILC Data Device Corporation
5962-9070703HYX	HSDC-8919II-1-A	ILC Data Device Corporation
5962-9070704HXC	SDC14502-606	ILC Data Device Corporation
5962-9070704HXX	SDC14502-606	ILC Data Device Corporation
5962-9070704HYX	HSDC-8919II-1	ILC Data Device Corporation
5962-9070705HXX	HSD1024-C672H/2	Natel Engineering Corporation
5962-9070706HXX	HSD1024-C673H/2	Natel Engineering Corporation
5962-9070707HXX	HSD1024-C674H/2	Natel Engineering Corporation
5962-9070708HXX	HSD1024-C675H/2	Natel Engineering Corporation
5962-9156001HXX	HSD1046-341V/2	Natel Engineering Corporation
5962-9156002HXX	HSD1046-341H/2	Natel Engineering Corporation
5962-9156003HXX	HSD1046-341S/2	Natel Engineering Corporation
5962-9161501HXX	HSD1510-369/2	Natel Engineering Corporation
5962-9205401HXX	SDC14612-112	ILC Data Device Corporation
5962-9205402HXX	SDC14612T-112	ILC Data Device Corporation
5962-9205403HXX	SDC14614-112	ILC Data Device Corporation
5962-9205404HXX	SDC14614T-112	ILC Data Device Corporation
5962-9205405HXX	SDC14617-112	ILC Data Device Corporation
5962-9205406HXX	SDC14617T-112	ILC Data Device Corporation
5962-9205407HXX	SDC14619-112	ILC Data Device Corporation
5962-9205408HXX	SDC14619T-112	ILC Data Device Corporation
5962-9205409HXX	SDC14617-114	ILC Data Device Corporation
5962-9205410HXX	SDC14617T-114	ILC Data Device Corporation

TABLE II

S/D CONVERTER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-9205411HXX 5962-9205412HXX	SDC14619-114 SDC14619T-114	ILC Data Device Corporation ILC Data Device Corporation

SAMPLE/HOLD

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8956501XX 5962-8956601HCX 5962-8994001HXX	HS362SB HS9716TB AD346SD/883	Sipex Corporation Sipex Corporation Analog Devices Incorporated

VOLTAGE FOLLOWER

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8965901XX 5962-8965901YX 5962-9090201HXX 5962-9090202HXX 8001401ZX 8001401ZX	EL2004G/883B ----- MSK332B-12 MSK332B-15 CTS0033ZB ELH0033G/883B	Elantec Incorporated NO APPROVED SOURCE M S Kennedy Corporation M S Kennedy Corporation CTS Corporation Elantec Incorporated

VOLTAGE REGULATOR

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-8949001XX 5962-8949002XX 5962-8949003XX 5962-8949004XX 5962-8949005XX 5962-8949006XX 5962-8949007XX 5962-8949008XX 5962-8949009XX 5962-9313401HXX 5962-9313402HXX	OM7509SC/883B OM7501SC/883B OM7502SC/883B OM7503SC/883B OM7504SC/883B OM7505SC/883B OM7506SC/883B OM7507SC/883B OM7508SC/883B ARX5006 ARX5007	Omnirel Corporation Omnirel Corporation Omnirel Corporation Omnirel Corporation Omnirel Corporation Omnirel Corporation Omnirel Corporation Omnirel Corporation Omnirel Corporation Aeroflex Laboratories Incorporated Aeroflex Laboratories Incorporated

TABLE II

VOLTAGE REGULATOR

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
5962-9313403HXX	ARX5008	Aeroflex Laboratories Incorporated
5962-9313404HXX	ARX5009	Aeroflex Laboratories Incorporated
5962-9313405HXX	ARX5010	Aeroflex Laboratories Incorporated
5962-9313406HXX	ARX5011	Aeroflex Laboratories Incorporated