

QUALIFICATIONS VALIDATED ANNUALLY

CUSTOM HYBRID MICROCIRCUITS
 QML-38534-12
 17 July 1991
 SUPERSEDING
 QML-38534-11
 10 April 1991

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 45444-5285.

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 S or Class B, with all the provisions of MIL-H-38534; MIL-STD-883, Test Method 5008; 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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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.

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HYBRID MICROCIRCUITS
QML-38534-12

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

QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQC-89-065) EQ(EQC-90-652)	Class H	N/A	AD/DA Converters DC/DC Converters Sample and Hold Amplifier

SUBSTRATE FABRICATION OPERATION (S) 1/	
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

ASSEMBLY OPERATION(S) 1/	
LOCATION: Santa Clara, CA FLOW: 8002-0044 CAPABILITY: polymer conductive epoxy; 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	
SUBSTRATE ATTACH: polymer conductive/nonconductive epoxy	

PACKAGE INFORMATION 1/ 2/ 3/	
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PACKAGE TYPE:	ceramic dual-in-line	metal, with axial leads
SEAL METHOD:	seam weld	seam weld
LEAD COUNT:	24	10
SEAL PERIMETER:	3.69	6.44
LEAD FINISH:	gold	nickel/gold

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.

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

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
5962-8950901XX	1	RGBDAC3808H/B	D/A conv., triple, 8-bit, video RAM	No
5962-8968301HXX	1	AHE2805S/HB	DC/DC conv., 5V, 15W out, single ch.	No
5962-8968301HXX	1	AHE2805SF/HB	DC/DC conv., 5V, 15W out, single ch.	No
5962-8968302HXX	1	AHE2805S/HBSLV	DC/DC conv., 5V, 15W out, single ch.	No
5962-8968302HXX	1	AHE2805S/HBSLV	DC/DC conv., 5V, 15W out, single ch.	No
5962-8968303HXX	1	AHE2805S/HBMST	DC/DC conv., 5V, 15W out, single ch.	No
5962-8968303HXX	1	AHE2805S/HBMST	DC/DC conv., 5V, 15W out, single ch.	No
5962-9162501HXX	1	AHE2815S/HB	DC/DC conv., 15V, 20W output	No
5962-9162501HXX	1	AHE2815SF/HB	DC/DC conv., 15V, 20W output	No
5962-9162502HXX	1	AHE2815S/HBSLV	DC/DC conv., 15V, 20W output	No
5962-9162502HXX	1	AHE2815SF/HBSLV	DC/DC conv., 15V, 20W output	No
5962-9162503HXX	1	AHE2815S/HBMST	DC/DC conv., 15V, 20W output	No
5962-9162503HXX	1	AHE2815SF/HBMST	DC/DC conv., 15V, 20W output	No

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

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HYBRID MICROCIRCUITS
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MANUFACTURER		CAGE CODE	SYMBOL CODE
Aeroflex Laboratories Incorporated 35 South Service Road Plainview, NY 11803		88379	CFAS
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQC-90-616)	Class H	N/A	Linear Analog Digital
SUBSTRATE FABRICATION OPERATION (S) 1/			
LOCATION: Plainview, NY FLOW: QAP21-241 CAPABILITY: thick film on alumina, 1 conductor levels, resistors		LOCATION: N/A FLOW: N/A CAPABILITY: N/A	
ASSEMBLY OPERATION(S) 1/			
LOCATION: Plainview, NY FLOW: QAP21-241 CAPABILITY: polymer conductive epoxy, eutectic; gold wire 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 1/ 2/ 3/			
PACKAGE TYPE:	metal, with axial leads		
SEAL METHOD:	seam weld		
LEAD COUNT:	24		
SEAL PERIMETER:	4.08		
LEAD FINISH:	gold		

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HYBRID MICROCIRCUITS
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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.

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

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
5962-8604903YX	1	ARX2402	Single channel driver-receiver	No
5962-8952202XX	1	ARX-2453	Interfaces with manchester encoder-decode 1553 transeceirer, dual channel	No

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 19

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 HYBRID MICROCIRCUITS
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MANUFACTURER		CAGE CODE	SYMBOL CODE
Analog Devices Incorporated Micro Electronics Division 829 Woburn Street Wilmington, Massachusetts 01887		51640	CEUJ
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQM-87-2531) EQ(EQC-89-253)	Class H	N/A	AD/DA Converters Voltage Reference Signal Processor
SUBSTRATE FABRICATION OPERATION (S) 1/			
LOCATION: Wilmington, MA FLOW: EE-QA-8419 CAPABILITY: thick film on alumina, 2 conductor levels, resistors		LOCATION: N/A FLOW: N/A CAPABILITY: N/A	
ASSEMBLY OPERATION(S) 1/			
LOCATION: Wilmington, MA FLOW: EE-QA-8122 CAPABILITY: polymer conductive/non-conductive epoxy; gold and aluminum 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 1/ 2/ 3/			
PACKAGE TYPE:	ceramic dual-in-line	TO can	
SEAL METHOD:	seam weld	projection weld	
LEAD COUNT:	32	12	
SEAL PERIMETER:	4.35	0.942	
LEAD FINISH:	gold	gold	

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.

MANUFACTURER	CAGE CODE	SYMBOL CODE
Analog Devices Incorporated Micro Electronics Division 829 Woburn Street Wilmington, Massachusetts 01887	51640	CEUJ

SPECIFIC PRODUCT TYPES				PRODUCT TYPE/DESCRIPTION	SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/			
8300201JX	1	DAC87		D/A Conv., 12-bit, programmable	Yes
8503001XX 5/	1	2700SD		Reference, Precision Voltage, +10V	Yes
8503002XX 5/	1	2700UD		Reference, Precision Voltage, +10V	Yes
8503003XX 5/	1	2701SD		Reference, Precision Voltage, -10V	Yes
8503004XX 5/	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
5962-8851003XX	1	AD395S		D/A conv, 12-bit, quad, unipolar	Yes
5962-8851004XX	1	AD395T		D/A conv, 12-bit, quad, unipolar	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

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

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HYBRID MICROCIRCUITS
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MANUFACTURER		CAGE CODE	SYMBOL CODE
Analog Devices Incorporated Computer Labs Division (CLD) 7910 Triad Center Drive Greensboro, North Carolina 27409		34031	CETW
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQM-87-1030) EQ(EQM-89-506) EQ(EQC-89-038) EQ(EQC-91-177)	Class H	N/A	Buffer Data Converters Op-Amp Track and Hold
SUBSTRATE FABRICATION OPERATION (S) I/			
LOCATION: Greensboro, NC FLOW: QAP 3060 CAPABILITY: thick film on alumina, 1 conductor level, resistors		LOCATION: Greensboro, NC FLOW: QAP 3060 CAPABILITY: thin film on alumina, 1 conductor level, resistors	
ASSEMBLY OPERATION(S) I/			
LOCATION: Greensboro, NC FLOW: QAP 3060 CAPABILITY: polymer conductive epoxy; 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			
PACKAGE INFORMATION I/ 2/ 3/			
PACKAGE TYPE:	TO can	metal, with axial leads	
SEAL METHOD:	projection Weld	seam Weld	
LEAD COUNT:	12	24	
SEAL PERIMETER:	1.91	4.08	
LEAD FINISH:	gold	gold	

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.

MANUFACTURER	CAGE CODE	SYMBOL CODE
Analog Devices Incorporated Computer Labs Division (CLD) 7910 Triad Center Drive Greensboro, North Carolina 27409	34031	CETW

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
8001301ZX	1	0032	Op amp, thick film	Yes
8001401ZX	1	0033	Hi Speed Buffer Amp, Volt. Foll., FET in	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

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

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 HYBRID MICROCIRCUITS
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MANUFACTURER		CAGE CODE	SYMBOL CODE
Apex Microtechnology Corporation 5980 North Shannon Road Tucson, AZ 85741		60024	CFAB
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQC-89-071) EQ(EQC-91-347)	Class H	Power Operational Amplifier	
RADIATION HARDNESS LEVEL			
N/A			
SUBSTRATE FABRICATION OPERATION(S) 1/			
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) 1/			
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 1/ 2/ 3/			
PACKAGE TYPE:	TO can		
SEAL METHOD:	projection weld		
LEAD COUNT:	8		
SEAL PERIMETER:	2.67		
LEAD FINISH:	gold		

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.

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

SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-8762002HXC	1	PA51M/883	High power operational amplifier	No
5962-906380IHXX	1	PA07M/883	Power operational amplifier	No
5962-906590IHXX	1	PA12M/883	Operational amplifier, power	No
5962-906790IHXX	1	PA02M/883	Power operational amplifier	No
5962-907230IHXX	1	PA08M/883	Power operational amplifier	No
5962-908280IHXX	1	PA10M/883	Power operational amplifier	No
5962-916210IHXX	1	PA83M/883	Power operational amplifier	No

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

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HYBRID MICROCIRCUITS
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MANUFACTURER		CAGE CODE	SYMBOL CODE
Beckman Industrial Corporation Electronic Technologies Division 4141 Palm Street Fullerton, California 92635		73138	CEXB
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQC-89-071)	Class H	Data Converters Voltage Regulator Analog	
RADIATION HARDNESS LEVEL			
N/A			

SUBSTRATE FABRICATION OPERATION (S) 1/

LOCATION: Fullerton, CA
 FLOW: 800-403-1
 CAPABILITY: thick film on alumina, 1 conductor level, resistors

ASSEMBLY OPERATION(S) 1/

LOCATION: Fullerton, CA
 FLOW: 800-403-1
 CAPABILITY: polymer conductive epoxy, eutectic; gold wire bonding

ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistors, molytabs
SUBSTRATE ATTACH: polymer nonconductive epoxy

PACKAGE INFORMATION 1/ 2/ 3/

PACKAGE TYPE:	metal, with peripheral leads
SEAL METHOD:	seam weld
LEAD COUNT:	38
SEAL PERIMETER:	3.58
LEAD FINISH:	solder

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.

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

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

QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQM-87-2947) EQ(EQC-91-046) EQ(EQC-91-079) EQ(EQC-91-228) EQ(EQC-91-395)	Class H	N/A	Custom

SUBSTRATE FABRICATION OPERATION (S) 1/	
LOCATION: Kent, WA FLOW: D900-10476-1-2 CAPABILITY: thick film on alumina, 10 conductor levels, resistors; thick film on beryllia, 4 conductor levels	LOCATION: N/A FLOW: N/A CAPABILITY: N/A

ASSEMBLY OPERATION(S) 1/	
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 1/ 2/ 3/	
PACKAGE TYPE: SEAL METHOD: LEAD COUNT: SEAL PERIMETER: LEAD FINISH:	metal, with axial leads seam weld 30 5.86 gold
PACKAGE TYPE: SEAL METHOD: LEAD COUNT: SEAL PERIMETER: LEAD FINISH:	metal, with peripheral leads seam weld 36 9.16 gold

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.

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

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: 3

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 HYBRID MICROCIRCUITS
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MANUFACTURER		CAGE CODE	SYMBOL CODE
Comlinear Corporation 4800 Wheaton Drive Fort Collins, Colorado 80525		62839	CEYA
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQC-89-0244) EQ(EQC-90-0392) EQ(EQC-90-0393)	Class H	Data Converters Op-Amp	
	RADIATION HARDNESS LEVEL		
	N/A		

SUBSTRATE FABRICATION OPERATION (S) 1/

LOCATION: Fort Collins, CO
 FLOW: TFS-01-001
 CAPABILITY: thin film on alumina, 1 conductor level, resistors

ASSEMBLY OPERATION(S) 1/

LOCATION: Fort Collins, CO
 FLOW: PDS-01-001
 CAPABILITY: polymer conductive/nonconductive epoxy; gold wire bonding

ADD-ON ELEMENTS: unpackaged die, chip capacitors
SUBSTRATE ATTACH: polymer nonconductive epoxy

PACKAGE INFORMATION 1/ 2/ 3/

PACKAGE TYPE:	TO can	Ceramic daul-in-line
SEAL METHOD:	projection weld	Seam weld
LEAD COUNT:	12	40
SEAL PERIMETER:	1.81	6.22
LEAD FINISH:	Gold	Gold

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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.

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

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
5962-8959401XX	1	CLC231A8C	Op amp, wideband, high speed	YES
5962-8985801XX	1	CLC206ABC	Op amp, wideband	YES
5962-8991001XX	1	CLC200ABC	Op. amp, wideband, high speed	YES
5962-8991101XX	1	CLC220ABC	Op amp, wideband	YES

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

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HYBRID MICROCIRCUITS
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MANUFACTURER		CAGE CODE	SYMBOL CODE
CTS Microelectronics 1201 Cumberland Avenue West Lafayette, Indiana 47906		23223	CEUR
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQM-88-1587) EQ(EQM-87-2173)	Class H	N/A	Analog Converter Power Converter

SUBSTRATE FABRICATION OPERATION (S) I/	
LOCATION: West Lafayette, IN FLOW: STD-RC-HIREL, STD-TF-MLT-LYR CAPABILITY: thick film on alumina, 3 conductor levels; Thick film on alumina, 1 conductor level, resistors	LOCATION: West Lafayette, IN FLOW: STD-THINFLM-BD1 CAPABILITY: thin film on alumina, 1 conductor level, resistors

ASSEMBLY OPERATION(S) I/	
LOCATION: West Lafayette, IN FLOW: STD-C&W-1772 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 SUBSTRATE ATTACH: polymer conductive/nonconductive epoxy, solder, eutectic	

PACKAGE INFORMATION I/ 2/ 3/	
PACKAGE TYPE: ceramic dual-in-line SEAL METHOD: solder LEAD COUNT: 14 SEAL PERIMETER: 1.39 LEAD FINISH: gold	TO can projection weld 12 2.75 gold/solder
Metal, with peripheral leads Seam weld 30 4.40 Gold	

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.

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

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
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

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 HYBRID MICROCIRCUITS
 QML-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
Datel Incorporated 11 Cabot Boulevard Mansfield, MA 02048-1194		50721	CFAT
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQC-90-0626) EQ(EQC-90-0677) EQ(EQC-91-029)	Class H	Digital	
	RADIATION HARDNESS LEVEL		
	N/A		
SUBSTRATE FABRICATION OPERATION (S) 1/			
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) 1/			
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 1/ 2/ 3/			
PACKAGE TYPE:	ceramic dual-in-line		
SEAL METHOD:	seam weld		
LEAD COUNT:	32		
SEAL PERIMETER:	5.57		
LEAD FINISH:	gold		

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.

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

SPECIFIC PRODUCT TYPES					SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION		
5962-8850801XX	1	ADC-HX/883B	A/D Conv., 12-bit, 20µs conversion time	No	
5962-8850802XX	1	ADC-Hz/883B	A/D Conv., 12-bit, 8µs conversion time	No	
5962-8952801XX	1	DAC HKB/883B	D/A Conv., 12-bit, binary input code	No	
5962-8952802XX	1	DAC HKB-2/883B	D/A Conv., 12-bit, two's complement	No	
5962-8953101XX	1	DAC HPB/883B	D/A Conv., 16-bit, 0 to +10, +5 volts output	No	
5962-8953102XX	1	DAC HPB-1/883B	D/A Conv., 16-bit, +10 volts output	No	

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

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HYBRID MICROCIRCUITS
QML-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
Elantec Incorporated 1996 Tarob Court Milpitas, California 95035		64762	CEWO
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQM-88-1646) EQ(EQC-90-0804)	Class H	N/A	Analog Converter Power Converter
SUBSTRATE FABRICATION OPERATION (S) 1/			
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) 1/			
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 1/ 2/ 3/			
PACKAGE TYPE: TO can SEAL METHOD: projection weld LEAD COUNT: 12 SEAL PERIMETER: 2.31 LEAD FINISH: gold & solder			

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.

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

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
7801301XX	1	0002	Amplifier, current, thick film	Yes
8001301ZX	1	0032	Op amp, thick film	Yes
8001401ZX	1	0033	Hi Speed Buffer Amp, Volt. Foll., FET in	Yes
8508701ZX	1	0041	Hi Power Op Amp, Ext. Comp., 0.2A Out.	Yes
8508801YX	1	ELH0021K	Hi pwr. Op amp, ext. comp., 1.0A Out.	Yes
8508901YX	1	ELH0101AK	Hi pwr. Op amp, wideband, thick film	Yes
8508902YX	1	ELH0101K	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

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 HYBRID MICROCIRCUITS
 QML-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
Film Microelectronics Incorporated 10-B Centennial Drive Peabody, Massachusetts 01960		27851	CEYB

QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQC-89-233)	Class H	N/A	Power (Buffer) Bi-polar

SUBSTRATE FABRICATION OPERATION (S) i/	
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) i/	
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 i/ 2/ 3/	
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PACKAGE TYPE:	metal, with peripheral leads
SEAL METHOD:	seam weld
LEAD COUNT:	19
SEAL PERIMETER:	4.78
LEAD FINISH:	gold

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.

MANUFACTURER	CAGE CODE	SYMBOL CODE
Film Microelectronics Incorporated 10-B Centennial Drive Peabody, Massachusetts 01960	27851	CEYB

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
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-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
General Microcircuits Corporation 780 Boston Road BillERICA, Massachusetts 08121		67294	CEYC
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQC-89-0235)	Class H	Custom	
RADIATION HARDNESS LEVEL	SUBSTRATE FABRICATION OPERATION (S) I/		
N/A	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) I/			
LOCATION: BillERICA, MA FLOW: 10000 CAPABILITY: polymer conductive 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 I/ 2/ 3/			
PACKAGE TYPE:	metal, with peripheral leads		
SEAL METHOD:	seam weld		
LEAD COUNT:	22		
SEAL PERIMETER:	2.05		
LEAD FINISH:	gold		

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.

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

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-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
Hewlett-Packard Company Optical Communications Division 370 West Trimble Road San Jose, California 95131		50434	CEUS
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQM-87-2594) EQ(EQM-88-1265) EQ(EQC-90-0754)	Class H	Optocoupler	
	RADIATION HARDNESS LEVEL		
	N/A		

SUBSTRATE FABRICATION OPERATION (S) 1/	
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) 1/	
LOCATION: San Jose, CA FLOW: 1CPI-0016-3 CAPABILITY: eutectic; gold and aluminum wire bonding	LOCATION: N/A FLOW: N/A CAPABILITY: N/A
ADD-ON ELEMENTS: unpackaged die SUBSTRATE ATTACH: eutectic, solder	

PACKAGE INFORMATION 1/ 2/ 3/	
PACKAGE TYPE: ceramic dual-in-line SEAL METHOD: solder LEAD COUNT: 16 SEAL PERIMETER: 1.28 LEAD FINISH: gold, solder	leadless chip carrier solder 20 0.92 solder

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HYBRID MICROCIRCUITS
QML-38534-12

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 listings does not in anyway represent or imply interchangeability, equivalency.

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

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
8102801EX	1	6N134	Optocoupler, dual channel	Yes
8302401EX	1	6N140A	Optocoupler, quad	Yes
5962-8767901EX	1	4N55/883B	Optocoupler, dual channel	Yes
5962-8767902PX	1	HCPL-5531	Optocoupler, dual channel	Yes
5962-87679032A	1	HCPL-6531	Optocoupler, dual channel	No
5962-8876801PX	1	HCPL-5201	Optocoupler, single channel	Yes
5962-8876901PX	1	HCPL-5231	Optocoupler, dual channel	Yes
5962-88769022X	1	HCPL-6231	Optocoupler, dual channel	No
5962-8947701PX	1	HCPL-5761	Optocoupler, AC/DC logic interface	No
5962-8957001PX	1	HCPL-5401	Optocoupler, high speed, single channel	Yes
5962-8957101PX	1	HCPL-5431	Optocoupler, high speed, dual channel	Yes
5962-89571022X	1	HCPL-6431	Optocoupler, dual channel, high speed	Yes
5962-8957201EX	1	HCPL-1931	Optocoupler-line receiver, dual channel	Yes
5962-8978501PX	1	HCPL-5731	Optocoupler, dual channel	Yes
5962-89785022X	1	HCPL-6731	Optocoupler, dual channel, LCC package	No
5962-8981001PX	1	HCPL-5701	Optocoupler, single channel, high gain	No
5962-9085401PX	1	HCPL-5501	Optocoupler, single ch., transistr out	No

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 21

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 HYBRID MICROCIRCUITS
 QML-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
Honeywell Incorporated Sperry Central Manufacturing 21111 North Nineteenth Avenue Phoenix, Arizona 85036		58960	CEUT
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQM-87-1933) EQ(EQC-90-0768)	Class H	N/A	Analog Digital Drive controller
SUBSTRATE FABRICATION OPERATION (S) 1/			
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) 1/			
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 1/ 2/ 3/			
PACKAGE TYPE: SEAL METHOD: LEAD COUNT: SEAL PERIMETER: LEAD FINISH:		metal, with peripheral leads seam weld 36 3.5 gold	

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.

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

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

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

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 HYBRID MICROCIRCUITS
 QML-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
Honeywell Incorporated Military Avionics Division 13350 U. S. Highway 19 South Clearwater, Florida 34624		09128	CEWN
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQM-88-1324)	Class H	Data converters Signal processors	
RADIATION HARDNESS LEVEL			
N/A			

SUBSTRATE FABRICATION OPERATION (S) 1/

LOCATION: Clearwater, FL
FLOW: DR16393
CAPABILITY: thin film on alumina, 1 conductor level, resistors

LOCATION: Clearwater, FL
FLOW: DR16393
CAPABILITY: thick film on alumina, 6 conductor levels, thick film on alumina, 3 conductor levels, resistors

ASSEMBLY OPERATION(S) 1/

LOCATION: Clearwater, FL
FLOW: DR16393
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 1/ 2/ 3/

PACKAGE TYPE:	metal, with peripheral leads	metal, with axial leads
SEAL METHOD:	seam weld	seam weld
LEAD COUNT:	16	16
SEAL PERIMETER:	2.77	2.0
LEAD FINISH:	gold	gold

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.

MANUFACTURER	CAGE CODE	SYMBOL CODE
Honeywell Incorporated Military Avionics Division 13350 U. S. Highway 19 South Clearwater, Florida 34624	09128	CEWN

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
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-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
Hughes Aircraft Company Microelectronics Circuit Division Space Business Unit 500 Superior Avenue Building 700 P. O. Box H Newport Beach, California 92658-8903		55267	CEYN
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQC-89-341)	Class H	N/A	Analog Digital
SUBSTRATE FABRICATION OPERATION (S) 1/			
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) 1/			
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 1/ 2/ 3/			
PACKAGE TYPE:	metal, with axial leads		
SEAL METHOD:	seam weld		
LEAD COUNT:	22		
SEAL PERIMETER:	2.03		
LEAD FINISH:	gold		

MANUFACTURER	CAGE CODE	SYMBOL CODE
Hughes Aircraft Company Microelectronics Circuit Division Multichip Microcircuit Business Unit (E1000) 500 Superior Avenue Building 700 P. O. Box H Newport Beach, California 92658-8903	55267	CEYN

QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQC-90-326)	Class H	N/A	Analog Digital

SUBSTRATE FABRICATION OPERATION (S) 1/

LOCATION: Multichip Microcircuit Business Unit, Newport, CA
 FLOW: 1051089
 CAPABILITY: thin film on alumina, 1 conductor level, resistors

ASSEMBLY OPERATION(S) 1/

LOCATION: Multichip Microcircuit Business Unit, Newport, CA
 FLOW: 1050994
 CAPABILITY: polymer conductive epoxy, eutectic; gold wire bonding

ADD-ON ELEMENTS: unpackaged die, chip capacitors, chip resistor
SUBSTRATE ATTACH: polymer nonconductive epoxy

PACKAGE INFORMATION 1/ 2/ 3/

PACKAGE TYPE:	leadless chip carrier
SEAL METHOD:	seam weld
LEAD COUNT:	68
SEAL PERIMETER:	4.25
LEAD FINISH:	solder

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 HYBRID MICROCIRCUITS
 QML-38534-12

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.

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

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
Hycomp Incorporated 165 Cedar Hill Street Marlborough, Massachusetts 01752		34707	CEXP
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQC-89-421)	Class H	N/A	Voltage Reference Analog
SUBSTRATE FABRICATION OPERATION (S) 1/			
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) 1/			
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 1/ 2/ 3/			
PACKAGE TYPE:	ceramic dual-in-line		
SEAL METHOD:	seam weld		
LEAD COUNT:	10		
SEAL PERIMETER:	2.9		
LEAD FINISH:	gold		

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HYBRID MICRO CIRCUITS
QML-38534-12

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.

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

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
8503001YX	1	2700SD	Reference, Precision Voltage, +10V	No
8503002XX	1	2700UD	Reference, Precision Voltage, +10V	No
8503003YX	1	2701SD	Reference, Precision Voltage, -10V	No
8503004XX	1	2702SD	Reference, Precision Voltage, +/-10V	No
8503005YX	1	2702UD	Reference, Precision Voltage, +/-10V	No
8503006YX	1	2701UD	Reference, Precision Voltage, -10V	No

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

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

QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQC-89-382)	Class H	N/A	Active Delay Line

SUBSTRATE FABRICATION OPERATION (S) 1/

LOCATION: Carson City, NV
 FLOW: RN1005-002
 CAPABILITY: thick film on alumina, 2 conductor levels, resistors

LOCATION: N/A
 FLOW: N/A
 CAPABILITY: N/A

ASSEMBLY OPERATION(S) 1/

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 1/ 2/ 3/

PACKAGE TYPE: platform
 SEAL METHOD: projection weld
 LEAD COUNT: 14
 SEAL PERIMETER: 2.75
 LEAD FINISH: solder

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 HYBRID MICROCIRCUITS
 QML-38534-12

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.

MANUFACTURER	CAGE CODE	SYMBOL CODE
HYTEK MICROSYSTEMS INCORPORATED 400 HOT SPRINGS ROAD CARSON CITY, NEVADA 89706	0ANM4	CEYO

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
None	N/A	N/A	N/A	N/A
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 74				

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 HYBRID MICROCIRCUITS
 QML-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
ILC Data Device Corporation 105 Wilbur Place Bohemia, New York 11716		19645	CEPB
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQC-90-220) EQ(EQC-91-306) EQ(EQC-91-308) EQ(EQC-91-386)	Class H	1553 Bus Data Converters	
	RADIATION HARDNESS LEVEL		
	N/A		

SUBSTRATE FABRICATION OPERATION (S) 1/

LOCATION: Bohemia, NY
 FLOW: 41637
 CAPABILITY: thick film on alumina, 5 conductor levels. thick film on alumina, 3 conductor levels, resistors

ASSEMBLY OPERATION(S) 1/

LOCATION: Bohemia, NY
 FLOW: 36070, 36071
 CAPABILITY: polymer conductive/nonconductive epoxy, solder; gold wire bonding

ADD-ON ELEMENTS: unpackaged die, chip capacitors
SUBSTRATE ATTACH: polymer nonconductive epoxy, solder

PACKAGE INFORMATION 1/ 2/ 3/

PACKAGE TYPE:	metal, with axial leads	metal, with peripheral leads	ceramic dual-in-line
SEAL METHOD:	seam weld	projection weld	seam weld
LEAD COUNT:	24	32	24
SEAL PERIMETER:	7.94	5.38	4.09
LEAD FINISH:	gold	gold	gold

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 HYBRID MICROCIRCUITS
 QML-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
ILC Data Device Corporation 30 Orville Drive Bohemia, New York 11716		19645	CEPB
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQC-90-657)	Class H	Data Converters	
	RADIATION HARDNESS LEVEL		
	N/A		
SUBSTRATE FABRICATION OPERATION (S) 1/			
LOCATION: Bohemia, NY FLOW: 41639 CAPABILITY: thick film on alumina, 3 conductor levels, resistors		LOCATION: Bohemia, NY FLOW: 41638 CAPABILITY: thin film on alumina, 1 conductor level, resistors	
ASSEMBLY OPERATION(S) 1/			
LOCATION: Bohemia, NY (Power Line) FLOW: 41634 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 conductive/nonconductive epoxy			
PACKAGE INFORMATION 1/ 2/ 3/			
PACKAGE TYPE: metal, with axial leads SEAL METHOD: seam weld LEAD COUNT: 24 SEAL PERIMETER: 4.10 LEAD FINISH: gold			

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.

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

SPECIFIC PRODUCT TYPES				PRODUCT TYPE/DESCRIPTION	SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/			
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
5962-8753501XA	1	BUS65112		1553 Remote Terminal Unit, Dual Redun.	Yes
5962-8753501YA	1	BUS65117		1553 Remote Terminal Unit, Dual Redun.	Yes
5962-8757902XA	1	BUS63125II		1553 Dual Ch., Drvr./Rec., Low Pwr., -15V	Yes
5962-8757902XC	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	HSDC8920A883B		R/S-to-digi. conv., 400Hz, +/-4.0 ARCMIN	Yes
5962-8768702XC	1	HSDC8920883B		R/S-to-digi. conv., 400Hz, +/-2.6 ARCMIN	No
5962-8851702XA	1	DAC02310-113		D/A Conv., 14-bit, deglitched	No
5962-8851702XC	1	DAC02310-113		D/A Conv., 14-bit, deglitched	Yes
5962-8851702YA	1	DAC02311-113		D/A Conv., 14-bit, deglitched	No
5962-8851702YC	1	DAC02311-113		D/A Conv., 14-bit, deglitched	No
5962-8851701XA	1	DAC02310-112		D/A Conv., 14-bit, deglitched	Yes
5962-8851701XC	1	DAC02310-112		D/A Conv., 14-bit, deglitched	Yes
5962-8851701YA	1	DAC02311-112		D/A Conv., 14-bit, deglitched	No
5962-8851701YC	1	DAC02311-112		D/A Conv., 14-bit, deglitched	No
5962-8854201XC	1	ADC00300-112		A/D Conv., 12-bit track/hold	Yes
5962-8858501XX	1	BUS65600-883B		1553 Bus Cntrl/RTU/MT, Dual Redundant	No
5962-8869201XA	1	BUS61553-883B		1553 Advcd. Intgrtd. MUX, 8K x 16 RAM	Yes
5962-8869201XC	1	BUS61553-883B		1553 Advcd. Intgrtd. MUX, 8k x 16 RAM	Yes
5962-8869201YA	1	BUS61563-883B		1553 Advcd. Intgrtd. MUX, 8k x 16 RAM	Yes
5962-8869201YC	1	BUS61563-883B		1553 Advcd. Intgrtd. MUX, 8K x 16 RAM	Yes

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HYBRID MICROCIRCUITS
QML-38534-12

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.

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

SPECIFIC PRODUCT TYPES				PRODUCT TYPE/DESCRIPTION	SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/			
5962-8869202XA	1	BUS61554-883B		1553 Advcnd. Intgrtd. MUX, 8K x 16 RAM	Yes
5962-8869202XC	1	BUS61554-883B		1553 Advcnd. Intgrtd. MUX, 8K x 16 RAM	Yes
5962-8869202YC	1	BUS61564-883B		1553 Advcnd. Intgrtd. MUX, 8K x 16 RAM	No
5962-8869203XC	1	BUS61555-883B		1553 Advcnd. Intgrtd. MUX, 8K x 16 RAM	No
5962-8869203YC	1	BUS61565-883B		1553 Advcnd. Intgrtd. MUX, 8K x 16 RAM	Yes
5962-8869204XC	1	BUS61556-883B		1553 Advcnd. Intgrtd. MUX, 8K x 16 RAM	No
5962-8944704HXC	1	BUS63135II		Dual channel, driver-reciever, rec.idle	Yes
5962-8944704HYC	1	BUS63136II		Dual channel, driver-reciever, rec.idle	No
5962-8949903XC	1	SDC14560-605		S/D Conv,11.8V,400Hz,Prog. Res.,2 Mn.Arc	Yes
5962-8982601XC	1	BUS63127II		Low power, dual channel, driver-reciever	Yes
5962-8982601YC	1	BUS63128II		Low power, dual channel, driver-reciever	Yes
5962-8990803XC	1	SDC14565-616		11.8V,400 Hz,80 Hz BW,R/D Converter	Yes
5962-9055101XC	1	SDC14567-111		DR/D converter,400Hz,+/-6.0 min. acc.	Yes
5962-9055102XC	1	SDC14567-112		DR/D converter,400Hz,+/-4.0 min. acc.	Yes
5962-9055103XC	1	SDC14567-114		DR/D converter,400Hz,+/-2.0 min. acc.	Yes
5962-9055104XC	1	SDC14567-115		DR/D converter,400Hz,+/-1.0 min. acc.	Yes
5962-9055105XC	1	SDC14569-111		DR/D converter,trim.vel.,400Hz,+/-6.0acc	Yes
5962-9055106XC	1	SDC14569-112		DR/D converter,trim.vel.,400Hz,+/-4.0acc	No
5962-9055107XC	1	SDC14569-114		DR/D converter,trim.vel.,400Hz,+/-2.0acc	No
5962-9055108XC	1	SDC14569-115		DR/D converter,trim.vel.,400Hz,+/-1.0acc.	No
5962-9055401XC	1	HSDC8915A883B		R/D or S/D converter,+/-2.6 arcmin acc.	No
5962-9055402XC	1	HSDC8915883B		R/D or S/D converter,+/-4.0 arcmin acc.	No
5962-9070701HXC	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	No
5962-9070703HXC	1	SDC14502-605		S/D converter,400Hz,11.8v,acc.+/-2.6	No
5962-9070704HXC	1	SDC14502-606		S/D converter,400Hz,11.8v,acc.+/-4.0	No

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

MANUFACTURER		CAGE CODE	SYMBOL CODE
Interpoint Corporation 10301 Willows Road Redmond, Washington 98052		50821	CEUU

QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQM-87-2838) EQ(EQM-89-0439)	Class H	N/A	Linear amplifier Signal processor Data converters Analog, Digital

SUBSTRATE FABRICATION OPERATION (S) 1/	
LOCATION: Redmond, WA FLOW: QA-039 CAPABILITY: thick film on alumina, 2 conductor levels, resistors	LOCATION: N/A FLOW: N/A CAPABILITY: N/A

ASSEMBLY OPERATION(S) 1/	
LOCATION: Redmond, WA FLOW: QA-039 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 1/ 2/ 3/	
PACKAGE TYPE: SEAL METHOD: LEAD COUNT: SEAL PERIMETER: LEAD FINISH:	metal, with axial leads seam weld 38 6.0 gold

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HYBRID MICROCIRCUITS
QML-38534-12

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.

MANUFACTURER	CAGE CODE	SYMBOL CODE
Interpoint Corporation 10301 Willows Road Redmond, Washington 98052	50821	CEUU

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-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
ITT Avionics Division 100 Kingsland Road Clifton, New Jersey 07014		28527	CEWQ
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQM-88-1955) EQ(EQC-91-367)	Class H	Memory Custom	
	RADIATION HARDNESS LEVEL		
	N/A		

SUBSTRATE FABRICATION OPERATION (S) 1/

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) 1/

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 post
SUBSTRATE ATTACH: polymer nonconductive epoxy

PACKAGE INFORMATION 1/ 2/ 3/

PACKAGE TYPE:	metal, with axial leads	metal, with peripheral leads
SEAL METHOD:	seam weld	seam weld
LEAD COUNT:	36	94
SEAL PERIMETER:	4.38	9.16
LEAD FINISH:	gold	gold

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 HYBRID MICROCIRCUITS
 QML-38534-12

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.

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

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-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
M.S. Kennedy Corporation 8170 Thompson Road Clay, NY 13041		51651	CFAA
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQC-90-451) EQ(EQC-90-507)	Class H	High Power DC-Amplifier	
RADIATION HARDNESS LEVEL			
N/A			
SUBSTRATE FABRICATION OPERATION (S) 1/			
LOCATION: Clay, NY FLOW: 2422-1563 CAPABILITY: thick film on alumina, 1 conductor level, resistors		LOCATION: Clay, NY FLOW: 2422-1563 CAPABILITY: thick film on beryllia, 2 conductor levels, resistors	
ASSEMBLY OPERATION(S) 1/			
LOCATION: Clay, 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 SUBSTRATE ATTACH: polymer conductive epoxy			
PACKAGE INFORMATION 1/ 2/ 3/			
PACKAGE TYPE: TO can			
SEAL METHOD: projection weld			
LEAD COUNT: 12			
SEAL PERIMETER: 3.14			
LEAD FINISH: gold			

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HYBRID MICROCIRCUITS
QML-38534-12

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.

MANUFACTURER	CAGE CODE	SYMBOL CODE
M.S. Kennedy Corporation 8170 Thompson Road Clay, NY 13041	51651	CFAA

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
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
Marconi Circuit Technology Corporation 160 Smith Street Farmingdale, NY 11735	32116	(TBD)

QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQC-91-369)	Class H	N/A	Digital

SUBSTRATE FABRICATION OPERATION (S) 1/	
LOCATION: Farmingdale, NY FLOW: 11-2915 CAPABILITY: thick film on alumina, 1 conductor level, resistors	LOCATION: N/A FLOW: N/A CAPABILITY: N/A

ASSEMBLY OPERATION(S) 1/	
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 SUBSTRATE ATTACH: solder	

PACKAGE INFORMATION 1/ 2/ 3/

PACKAGE TYPE:	metal, with peripheral leads
SEAL METHOD:	seam weld
LEAD COUNT:	22
SEAL PERIMETER:	2.05
LEAD FINISH:	gold

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HYBRID MICROCIRCUITS
QML-38534-12

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.

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

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: 2

MANUFACTURER	CAGE CODE	SYMBOL CODE
Martin Marietta Building E-8 12506 Lake Underhill Drive Orlando, FL 32862-8007	04939	(TBD)

QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQC-91-402)	Class H	N/A	Analog

SUBSTRATE FABRICATION OPERATION (S) 1/	
LOCATION: N/A FLOW: N/A CAPABILITY: co-fire package	LOCATION: N/A FLOW: N/A CAPABILITY: N/A

ASSEMBLY OPERATION(S) 1/	
LOCATION: Orlando, FL FLOW: 72301772 CAPABILITY: polymer conductive epoxy, gold wire bonding	LOCATION: N/A FLOW: N/A CAPABILITY: N/A
ADD-ON ELEMENTS: unpackaged die, chip capacitors SUBSTRATE ATTACH: N/A	

PACKAGE INFORMATION 1/ 2/ 3/

PACKAGE TYPE:	ceramic leadless chip carrier
SEAL METHOD:	solder
LEAD COUNT:	68
SEAL PERIMETER:	3.8
LEAD FINISH:	gold

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HYBRID MICROCIRCUITS
QML-38534-12

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.

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

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
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-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
Micro-Rel Division Medtronic Incorporated 2343 West Tenth Place Tempe, Arizona 85281		8K957	CEUZ
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQM-88-221) EQ(EQC-91-417)	Class H	Linear	
RADIATION HARDNESS LEVEL		SUBSTRATE FABRICATION OPERATION (S) 1/	
N/A		LOCATION: N/A FLOW: N/A CAPABILITY: N/A	
LOCATION: Tempe, AZ FLOW: 1403818 CAPABILITY: co-fire on alumina, 5 conductor levels		ASSEMBLY OPERATION(S) 1/	
LOCATION: Tempe, AZ FLOW: 1403818 CAPABILITY: polymer conductive epoxy; gold wire bonding		LOCATION: N/A FLOW: N/A CAPABILITY: N/A	
ADD-ON ELEMENTS: unpackaged die, chip capacitors SUBSTRATE ATTACH: N/A			
PACKAGE INFORMATION 1/ 2/ 3/			
PACKAGE TYPE:	leadless chip carrier	metal, with axisie leads	
SEAL METHOD:	solder	seam weld	
LEAD COUNT:	76	36	
SEAL PERIMETER:	3.5	4.36	
LEAD FINISH:	solder	gold	

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HYBRID MICROCIRCUITS
QML-38534-12

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.

MANUFACTURER	CAGE CODE	SYMBOL CODE
Micro-Re1 Division Medtronic Incorporated 2343 West Tenth Place Tempe, Arizona 85281	8K957	CEUZ

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	No

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

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 HYBRID MICROCIRCUITS
 QML-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
Micro System Engineering Incorporated 6024 Southwest Jean Road Lake Oswego, OR 97034		75800	CFAU
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQC-90-619)	Class H	Digital	
RADIATION HARDNESS LEVEL			
N/A			
SUBSTRATE FABRICATION OPERATION (S) 1/			
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) 1/			
LOCATION: Lake Oswego, OR FLOW: 3100001 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 SUBSTRATE ATTACH: polymer nonconductive epoxy			
PACKAGE INFORMATION 1/ 2/ 3/			
PACKAGE TYPE:	metal, with axial leads		
SEAL METHOD:	seam weld		
LEAD COUNT:	34		
SEAL PERIMETER:	5.0		
LEAD FINISH:	gold		

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HYBRID MICROCIRCUITS
QML-38534-12

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.

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

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
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-38534-12

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

QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQM-88-0709) EQ(EQC-91-235)	Class H	N/A	Data converters Track and Hold Amplifier

SUBSTRATE FABRICATION OPERATION (S) 1/

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) 1/

LOCATION: Worcester, MA
 FLOW: FC-25
 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
SUBSTRATE ATTACH: polymer nonconductive epoxy

PACKAGE INFORMATION 1/ 2/ 3/

PACKAGE TYPE: ceramic dual-in-line
SEAL METHOD: seam weld
LEAD COUNT: 24
SEAL PERIMETER: 4.7
LEAD FINISH: gold

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 HYBRID MICROCIRCUITS
 QML-38534-12

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.

MANUFACTURER		CAGE CODE	SYMBOL CODE	
Micro Networks Company 324 Clarke Street Worcester, Massachusetts 01606		50507	CEVQ	
SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-8768801XX	1	MN3008HF/B	D/A Conv., 8-bit, 0 to 4V output	Yes
5962-8768802XX	1	MN3009HF/B	D/A Conv., 8-bit, -2V to +2V Output	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	No
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	No
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 200				

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.

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

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
5962-8959501XX	1	MN5245H/B	D/A Conv., 12-bit, 0 to+5V	No
5962-8959502XX	1	MN5245AH/B	A/D Conv., 12-bit, 0 to+5 V, 3-State output	No
5962-8959503XX	1	MN5246H/B	A/D Conv., 12-bit, + 2.5 V	No
5962-8959504XX	1	MN5246AH/B	A/D Conv., 12-bit, +2.5V, 3-State output	No
5962-8971801XX	1	MN3020H/B	A/D Conv., 8-bit, with input register	No

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 HYBRID MICROCIRCUITS
 QML-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
Micropac Industries, Incorporated 905 East Walnut Street Garland, TX 75040		31757	CEJG
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQC-91-178)	Class H	Custom	
RADIATION HARDNESS LEVEL			
N/A			
SUBSTRATE FABRICATION OPERATION (S) 1/			
LOCATION: Garland, TX (Hybrid Line) FLOW: 90138 CAPABILITY: thick film on alumina, 1 conductor level, resistors		LOCATION: N/A FLOW: N/A CAPABILITY: N/A	
ASSEMBLY OPERATION(S) 1/			
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			
PACKAGE INFORMATION 1/ 2/ 3/			
PACKAGE TYPE:	metal, with axial leads		
SEAL METHOD:	seam weld		
LEAD COUNT:	28		
SEAL PERIMETER:	5.0		
LEAD FINISH:	gold		

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HYBRID MICROCIRCUITS
QML-38534-12

MANUFACTURER	CAGE CODE	SYMBOL CODE
Micropac Industries, Incorporated 912 East Walnut Street Garland, TX 75040	31757	CEJG

QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQC-90-625) EQ(EQC-91-328) EQ(EQC-91-338)	Class H	N/A	Power

SUBSTRATE FABRICATION OPERATION (S) 1/

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) 1/

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 1/ 2/ 3/

PACKAGE TYPE:	TO can
SEAL METHOD:	projection weld
LEAD COUNT:	2
SEAL PERIMETER:	2.27
LEAD FINISH:	gold

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 HYBRID MICROCIRCUITS
 QML-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
Micropac Industries, Incorporated 725 East Walnut Street Garland, TX 75040		31757	CEJG
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQC-90-624) EQ(EQC-91-188)	Class H	Optocoupler	
	RADIATION HARDNESS LEVEL		
	N/A		

SUBSTRATE FABRICATION OPERATION (S) 1/

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) 1/

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 nonconductive epoxy

PACKAGE INFORMATION 1/ 2/ 3/

PACKAGE TYPE:	ceramic dual-in-line	leadless chip carrier
SEAL METHOD:	solder	solder
LEAD COUNT:	16	24
SEAL PERIMETER:	1.89	1.60
LEAD FINISH:	gold	solder

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 HYBRID MICROCIRCUITS
 QML-38534-12

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 listings does not in anyway represent or imply interchangeability, equivalency.

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

SPECIFIC PRODUCT TYPES					SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION		
8102801EX	1	6N134/883B	Optical coupler (dual)	Yes	
8302401EX	1	6N140/883B	Four channel optical coupler	Yes	
5962-9063801HXX	1	MIOP42119/883	Op amp, high power	No	
5962-9065901HXX	1	MIOP42109/883	Op amp, power	No	
5962-9072301HXX	1	MIOP42116/883	Op amp, high power	No	
5962-9082801HXX	1	MIOP42115/883	Op amp, high power	No	

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

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 HYBRID MICROCIRCUITS
 QML-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
National Hybrid, Incorporated 2200 Smithtown Ave Ronkonkoma, NY 11779		57363	CFAQ
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQC-90-557)	Class H	N/A	Linear, Sample and Hold Data Converters, Data Bus Digitals, Custom, Amplifier
SUBSTRATE FABRICATION OPERATION (S) 1/			
LOCATION: Ronkonkoma, NY FLOW: FL1772A7THK CAPABILITY: thick film on alumina, 2 gold conductive layers, resistors. thick film on beryllia, 1 gold conductive layer.		LOCATION: N/A FLOW: N/A CAPABILITY: N/A	
ASSEMBLY OPERATION(S) 1/			
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 SUBSTRATE ATTACH: polymer nonconductive epoxy			
PACKAGE INFORMATION 1/ 2/ 3/			
PACKAGE TYPE:	metal package, axial leads		
SEAL METHOD:	seam weld		
LEAD COUNT:	24		
SEAL PERIMETER:	4.08		
LEAD FINISH:	gold		

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HYBRID MICROCIRCUITS
QML-38534-12

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.

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

SPECIFIC PRODUCT TYPES				
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SHIPPED
5962-8604906YX	1	NHI-1509	Dual channel digital driver-receiver	No

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

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HYBRID MICROCIRCUITS
QML-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
National Semiconductor 5900 South Calle Santa Cruz Tucson, Arizona 85706		27014	CCXP
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQM-87-1840) EQ(EQC-90-0627)	Class H	Analog Converter Power Converter	
	RADIATION HARDNESS LEVEL		
	N/A		

SUBSTRATE FABRICATION OPERATION (S) 1/

LOCATION: Santa Clara, CA
 FLOW: 902471
 CAPABILITY: thick film on alumina, 1 conductor level, resistors

LOCATION: N/A
 FLOW: N/A
 CAPABILITY: N/A

ASSEMBLY OPERATION(S) 1/

LOCATION: Tucson, AZ
 FLOW: (TU) AS-4000H
 CAPABILITY: eutectic; gold wire bonding

LOCATION: N/A
 FLOW: N/A
 CAPABILITY: N/A

ADD-ON ELEMENTS: unpackaged die, tab
SUBSTRATE ATTACH: solder

PACKAGE INFORMATION 1/ 2/ 3/

PACKAGE TYPE:	TO can
SEAL METHOD:	projection weld
LEAD COUNT:	8
SEAL PERIMETER:	2.638
LEAD FINISH:	solder

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.

MANUFACTURER	CAGE CODE	SYMBOL CODE
National Semiconductor 5900 South Calle Santa Cruz Tucson, Arizona 85706	27014	CCXP

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
7801301XX	3	0002	Amplifier, current, thick film	Yes
8001301ZX	1	LH0032G	Op amp, thick film	No
8001401ZX	1	LH0033G	Hi Spd. Buffr. Amp., Vol. Fol., Fet in	No
8508701ZX	1	LH0041G/883	Hi Pwr. Op Amp, Ext. Comp., 0.2A Out.	No
8508801XX	1	LH0021	Hi Pwr. Op Amp, Ext. Comp.	No
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT:				1

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 HYBRID MICROCIRCUITS
 QML-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
Omnirel Corporation 205 Crawford Street Leominster, MA 01453		69210	CESN
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQC-91-408)	Class H	Voltage Regulator	
	N/A		
SUBSTRATE FABRICATION OPERATION (S) 1/			
LOCATION: Leominster, MA FLOW: D070002G CAPABILITY: Thick film on alumina, 2 conductor levels,		LOCATION: N/A FLOW: N/A CAPABILITY: N/A	
ASSEMBLY OPERATION(S) 1/			
LOCATION: Leominster, MA FLOW: D050015G CAPABILITY: solder, gold and aluminum wire bonding		LOCATION: N/A FLOW: N/A CAPABILITY: N/A	
ADD-ON ELEMENTS: unpackaged die SUBSTRATE ATTACH: solder			
PACKAGE INFORMATION 1/ 2/ 3/			
PACKAGE TYPE:	Metal, with peripheral leads		
SEAL METHOD:	Seam weld		
LEAD COUNT:	5		
SEAL PERIMETER:	2.47		
LEAD FINISH:	Nickel/tin		

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HYBRID MICROCIRCUITS
QML-38534-12

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.

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

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
5962-8949001XX	1	OM7509SC/883B	Linear, Dual, Pos. and Neg. Regulator	No

NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT: 13

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 HYBRID MICROCIRCUITS
 QML-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
Philips Circuit Assemblies 100 Providence Pike Slatersville, RI 02876		25403	(TBD)
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQC-91-0159)	Class H	Analog Digital Linear	
RADIATION HARDNESS LEVEL			
N/A			
SUBSTRATE FABRICATION OPERATION (S) 1/			
LOCATION: Slatersville, RI FLOW: Form 145 CAPABILITY: thin film on alumina, 1 conductor level, resistor		LOCATION: N/A FLOW: N/A CAPABILITY: N/A	
ASSEMBLY OPERATION(S) 1/			
LOCATION: Slatersville, RI FLOW: Form 539 CAPABILITY: polymer conductive 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 1/ 2/ 3/			
PACKAGE TYPE:	metal, peripheral lead		
SEAL METHOD:	solder seam seal		
LEAD COUNT:	14		
SEAL PERIMETER:	1.52		
LEAD FINISH:	gold		

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.

MANUFACTURER	CAGE CODE	SYMBOL CODE
Philips Circuit Assemblies 100 Providence Pike Slatersville, RI 02876	25403	(TBD)

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-38534-12

MANUFACTURER	CAGE CODE	SYMBOL CODE
Raytheon Company Microwave and Power Tube Division Industrial Components Operation P. O. Box 5300 465 Centre Street Quincy, Massachusetts 02269	94144	CETX

QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQM-87-1031)	Class H	N/A	Amplifier

SUBSTRATE FABRICATION OPERATION (S) 1/	
LOCATION: Quincy, MA FLOW: 38756 CAPABILITY: thick film on alumina, 1 conductor level, resistors	LOCATION: N/A FLOW: N/A CAPABILITY: N/A

ASSEMBLY OPERATION(S) 1/	
LOCATION: Quincy, MA FLOW: 38230, 42771 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 1/ 2/ 3/	
PACKAGE TYPE: SEAL METHOD: LEAD COUNT: SEAL PERIMETER: LEAD FINISH:	metal, with axial leads seam weld 13 2.76 gold

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.

MANUFACTURER	CAGE CODE	SYMBOL CODE
Raytheon Company Microwave and Power Tube Division Industrial Components Operation P. O. Box 5300 Quincy, Massachusetts 02269	94144	CETX

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

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

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 HYBRID MICROCIRCUITS
 QML-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
SIPEX Corporation Hybrid Systems Division 22 Linnell Circle BillERICA, MA 01821		33256	CFAC
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQC-90-506)	Class H	N/A	AD Converters Sample and Hold Amplifier
SUBSTRATE FABRICATION OPERATION (S) 1/			
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) 1/			
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 SUBSTRATE ATTACH: polymer nonconductive epoxy			
PACKAGE INFORMATION 1/ 2/ 3/			
PACKAGE TYPE:	ceramic dual-in-line		
SEAL METHOD:	seam weld		
LEAD COUNT:	24		
SEAL PERIMETER:	4.07		
LEAD FINISH:	gold		

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HYBRID MICROCIRCUITS
QML-38534-12

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.

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

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
5962-8956601HCX	1	HS9716TB	16-bit sample and hold amplifier	No
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT:				0

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 HYBRID MICROCIRCUITS
 QML-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
Teledyne Components 40 Allied Drive Dedham, Massachusetts 02026		29832	CETY
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQM-87-1114)	Class H	linear buffer amplifier	
	RADIATION HARDNESS LEVEL		
	N/A		
SUBSTRATE FABRICATION OPERATION (S) 1/			
LOCATION: Dedham, MA FLOW: 80710825 CAPABILITY: thick film on alumina, 1 conductor levels, resistors		LOCATION: N/A FLOW: N/A CAPABILITY: N/A	
ASSEMBLY OPERATION(S) 1/			
LOCATION: Dedham, MA FLOW: 80320260 CAPABILITY: polymer conductive/nonconductive epoxy; gold wire bonding		LOCATION: N/A FLOW: N/A CAPABILITY: N/A	
ADD-ON ELEMENTS: unpackaged die, chip resistors SUBSTRATE ATTACH: polymer nonconductive epoxy			
PACKAGE INFORMATION 1/ 2/ 3/			
PACKAGE TYPE:	TO can		
SEAL METHOD:	projection weld		
LEAD COUNT:	12		
SEAL PERIMETER:	2.00		
LEAD FINISH:	gold		

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HYBRID MICROCIRCUITS
QML-38534-12

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.

MANUFACTURER	CAGE CODE	SYMBOL CODE
Teledyne Components 40 Allied Drive Dedham, Massachusetts 02026	29832	CETY

SPECIFIC PRODUCT TYPES				SHIPPED
STANDARDIZED MILITARY DRAWING (SMD)	ESDS CLASS	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	
8001401ZX	1	0033	Hi Speed Buffer Amp, Volt. Foll., FET in	No
NUMBER OF SCD/SID DEVICES COVERED BY QUALIFICATION TESTING MIL-H-38534 COMPLIANT:				1

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 HYBRID MICROCIRCUITS
 QML-38534-12

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

QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQM-87-1898)	Class H	N/A	Data converters linear

SUBSTRATE FABRICATION OPERATION (S) 1/	
LOCATION: Los Angeles, CA FLOW: 7700530 Exhibit 2.5 CAPABILITY: thick film on alumina, 7 conductor levels	LOCATION: Los Angeles, CA FLOW: 7700530 Exhibit 2.4 CAPABILITY: thin film on alumina, 2 conductor levels, resistors

ASSEMBLY OPERATION(S) 1/	
LOCATION: Los Angeles, CA FLOW: 700530 Exhibit 2.6 CAPABILITY: polymer conductive epoxy, solder; gold and aluminum wire bonding	LOCATION: N/A FLOW: N/A CAPABILITY: N/A
ADD-ON ELEMENTS: unpackaged die, chip capacitors	
SUBSTRATE ATTACH: solder	

PACKAGE INFORMATION 1/ 2/ 3/

PACKAGE TYPE:	metal, with peripheral leads
SEAL METHOD:	seam weld
LEAD COUNT:	46
SEAL PERIMETER:	5.00
LEAD FINISH:	gold

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.

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

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

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

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 HYBRID MICROCIRCUITS
 QML-38534-12

MANUFACTURER	CAGE CODE	SYMBOL CODE
Texas Instruments Inc DSEG/MPS Hybrids P. O. Box 655012 Dallas, TX 75265	96214	CFCA

QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQC-91-031)	Class H	N/A	linear

LOCATION: Dallas, Texas FLOW: AII-HYB-005 CAPABILITY: thick film on alumina, 5 conductor levels, resistors	SUBSTRATE FABRICATION OPERATION (S) 1/
	LOCATION: N/A FLOW: N/A CAPABILITY: N/A

LOCATION: Dallas, Texas FLOW: AII-HYB-005 CAPABILITY: polymer conductive epoxy; gold wire bonding	ASSEMBLY OPERATION(S) 1/
	LOCATION: N/A FLOW: N/A CAPABILITY: N/A
ADD-ON ELEMENTS: unpackaged die, chip capacitors SUBSTRATE ATTACH: polymer nonconductive epoxy	

PACKAGE INFORMATION 1/ 2/ 3/	
PACKAGE TYPE: metal, with axial leads	
SEAL METHOD: seam weld	
LEAD COUNT: 64	
SEAL PERIMETER: 7.88	
LEAD FINISH: gold	

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.

MANUFACTURER	CAGE CODE	SYMBOL CODE
Texas Instruments Inc DSEG/MPS Hybrids P. O. Box 655012 Dallas, TX 75265	96214	CFCA

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-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
Vitarel Microelectronics 6828 Nancy Ridge Drive San Diego, California 92121		66632	CEXE
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	TECHNOLOGY TYPES	
EQ(EQC-89-0107)	Class H	op-amp analog digital	
		RADIATION HARDNESS LEVEL	
		N/A	

SUBSTRATE FABRICATION OPERATION (S) 1/

LOCATION: San Diego, CA
 FLOW: PF9001010
 CAPABILITY: thick film on alumina, 1 conductor levels, resistors

LOCATION: N/A
 FLOW: N/A
 CAPABILITY: N/A

ASSEMBLY OPERATION(S) 1/

LOCATION: San Diego, CA
 FLOW: PF9001004, PF9001007, PF900103
 CAPABILITY: polymer conductive epoxy; gold wire bonding

LOCATION: N/A
 FLOW: N/A
 CAPABILITY: N/A

ADD-ON ELEMENTS: unpackaged die
SUBSTRATE ATTACH: polymer nonconductive epoxy

PACKAGE INFORMATION 1/ 2/ 3/

PACKAGE TYPE:	TO can
SEAL METHOD:	projection weld
LEAD COUNT:	8
SEAL PERIMETER:	1.26
LEAD FINISH:	gold

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.

MANUFACTURER Vitarel Microelectronics 6828 Nancy Ridge Drive San Diego, California 92121	CAGE CODE 66632	SYMBOL CODE CEXE
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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-38534-12

MANUFACTURER		CAGE CODE	SYMBOL CODE
Westinghouse Electric Corporation P. O. Box 746 Baltimore, MD 21203		97942	CFAR
QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQC-90-567)	Class H	N/A	Custom Digital Analog
SUBSTRATE FABRICATION OPERATION (S) 1/			
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) 1/			
LOCATION: Baltimore, MD FLOW: 1L88-2461-5/DM 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, spacer post, tab SUBSTRATE ATTACH: polymer nonconductive epoxy			
PACKAGE INFORMATION 1/ 2/ 3/			
PACKAGE TYPE:	metal, with peripheral leads		
SEAL METHOD:	seam weld		
LEAD COUNT:	68		
SEAL PERIMETER:	5.92		
LEAD FINISH:	gold		

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HYBRID MICROCIRCUITS
QML-38534-12

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.

MANUFACTURER	CAGE CODE	SYMBOL CODE
Westinghouse Electric Corporation P. O. Box 746 Baltimore, MD 21203	97942	CFAR

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-38534-12

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

QUALIFICATION LETTER(S)	PRODUCT CLASS DESIGNATOR	RADIATION HARDNESS LEVEL	TECHNOLOGY TYPES
EQ(EQC-90-019)	Class H	N/A	linear (oscillator)

SUBSTRATE FABRICATION OPERATION (S) 1/

LOCATION: Phoenix, AZ
 FLOW: 106B00006
 CAPABILITY: thick film on alumina, 1 conductor levels, resistors

LOCATION: N/A
 FLOW: N/A
 CAPABILITY: N/A

ASSEMBLY OPERATION(S) 1/

LOCATION: Phoenix, AZ
 FLOW: 106B00006
 CAPABILITY: polymer conductive epoxy; gold wire bonding

LOCATION: N/A
 FLOW: N/A
 CAPABILITY: N/A

ADD-ON ELEMENTS: unpackaged die, chip resistors
SUBSTRATE ATTACH: polymer nonconductive epoxy

PACKAGE INFORMATION 1/ 2/ 3/

PACKAGE TYPE:	platform
SEAL METHOD:	projection weld
LEAD COUNT:	16
SEAL PERIMETER:	3.53
LEAD FINISH:	gold

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.

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

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: 1

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HYBRID MICROCIRCUITS
QML-38534-12

TABLE I

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.

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SOURCE(S)
7801301GX	CTS0002	Amplifier, current, thick/thin film	CTS Corporation
7801301XX	CTS0002XB	Amplifier, current, thick/thin film	CTS Corporation
7801301XX	ELH0002H/883B	Amplifier, current, thick film	Elantec Incorporated
80013012X	LH0002H/883B	Amplifier, current, thick film	National Semiconductor Corporation
80013012X	ADLH0032G/883B	Op amp, thick film	Analog Devices Computer Labs Div.
80013012X	CTS00322B	Op amp, thick film	CTS Corporation
80013012X	ELH0032G/883E10003	Op amp, thick film	Elantec Incorporated
80013012X	LH0032G	Op amp, thick film	NO APPROVED SOURCE
80013012X	ADLH0033G/883B	Op amp, Buffr. Amp., Vol. Fol., FET in	National Semiconductor Corporation
80014012X	CTS00332B	Hi Spd. Buffr. Amp., Vol. Fol., FET in	Analog Devices Computer Labs Div.
80014012X	ELH0033G/883B	Hi Spd. Buffr. Amp., Vol. Fol., FET in	CTS Corporation
80014012X	LH0033G	Hi Spd. Buffr. Amp., Vol. Fol., FET in	Elantec Incorporated
80014012X	TP0033-83	Hi Spd. Buffr. Amp., Vol. Fol., FET in	National Semiconductor Corporation
8102801EX	6N134/883B	Hi Spd. Buffr. Amp., Vol. Fol., FET in	Teledyne Components
8102801EX	6N134/883B	Optocoupler, Dual Channel	Hewlett-Packard Company
8300201JX	DAC87CBI	Optocoupler, Dual Channel	Micropac Industries Incorporated
8300201XX	---	D/A Conv., 12-bit, Programmable	Analog Devices MED
8302401EX	6N140A/883B	D/A Conv., 12-bit, Programmable	NO APPROVED SOURCE
8302401EX	6N140A/883B	Optocoupler, Quad	Hewlett-Packard Company
8503001CX	---	Optocoupler, Quad	Micropac Industries Incorporated
8503001XX	2700SD/883B	Reference, Precision Voltage, +10V	NO APPROVED SOURCE
8503001YX	2700SD/883B	Reference, Precision Voltage, +10V	NO APPROVED SOURCE
8503001YX	HC2700SD/883B	Reference, Precision Voltage, +10V	Analog Devices MED
85030023X	---	Reference, Precision Voltage, +10V	Analog Devices MED
8503002CX	---	Reference, Precision Voltage, +10V	Hycomp Incorporated
8503002XX	2700UD/883B	Reference, Precision Voltage, +10V	NO APPROVED SOURCE
8503002YX	2700UD/883B	Reference, Precision Voltage, +10V	NO APPROVED SOURCE
8503002YX	HC2700UD/883B	Reference, Precision Voltage, +10V	Analog Devices MED
85030033X	---	Reference, Precision Voltage, -10V	NO APPROVED SOURCE
8503003XX	2701SD/883B	Reference, Precision Voltage, -10V	Analog Devices MED
8503003YX	2702SD/883B	Reference, Precision Voltage, -10V	Analog Devices MED
8503003YX	HC2702SD/883B	Reference, Precision Voltage, -10V	Hycomp Incorporated
85030043X	---	Reference, Precision Voltage, +/-10V	NO APPROVED SOURCE
8503004CX	---	Reference, Precision Voltage, +/-10V	NO APPROVED SOURCE
8503004XX	2702SD/883B	Reference, Precision Voltage, +/-10V	Analog Devices MED

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STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SOURCE(S)
8503004YX	2702UD/883B	Reference, Precision Voltage, +/-10V	Analog Devices MED
8503004YX	HC2702UD/883B	Reference, Precision Voltage, +/-10V	Hycomp Incorporated
85030053X	-----	Reference, Precision Voltage, +/-10V	NO APPROVED SOURCE
8503005CX	-----	Reference, Precision Voltage, +/-10V	NO APPROVED SOURCE
8503005YX	2701SD/883B	Reference, Precision Voltage, +/-10V	Analog Devices MED
8503005YX	HC2701SD/883B	Reference, Precision Voltage, +/-10V	Hycomp Incorporated
85030063X	-----	Reference, Precision Voltage, -10V	NO APPROVED SOURCE
8503006CX	-----	Reference, Precision Voltage, -10V	NO APPROVED SOURCE
8503006YX	2701UD/883B	Reference, Precision Voltage, -10V	Analog Devices MED
8503006YX	HC2701UD/883B	Reference, Precision Voltage, -10V	Hycomp Incorporated
8508701ZX	CTS0041ZBNEW	Hi Pwr. Op Amp, Ext. Comp., 0.2A Out.	CTS Corporation
8508701ZX	ELH0041G/883B	Hi Pwr. Op Amp, Ext. Comp., 0.2A Out.	Elantec Incorporated
8508701ZX	LH0041G/883	Hi Pwr. Op Amp, Ext. Comp., 0.2A Out.	Hycomp Incorporated
8508801YX	CTS0021ZB	Hi Pwr. Op Amp, Ext. Comp., 1.0A Out.	CTS Corporation
8508801YX	ELH0021K/E10036	Hi Pwr. Op Amp, Ext. Comp., 1.0A Out.	Elantec Incorporated
8508801YX	LH0021K	Hi Pwr. Op Amp, Ext. Comp., 1.0A Out.	National Semiconductor Corporation
8508901YX	ELH0101AK/E10039	Power Op amp., Wideband, Thick Film	Elantec Incorporated
8508902YX	ELH0101K/E10038	Power Op Amp., Wideband, Thick Film	Elantec Incorporated
5962-8604901XX	-----	1553 Single Ch. Dvr/Rec	NO APPROVED SOURCE
5962-8604902TX	BUS-83106II	1553 Single Ch. Dvr/Rec., Low Power	ILC Data Device Corporation
5962-8604902XX	BUS-3105	1553 Single Ch. Dvr/Rec., Low Power	ILC Data Device Corporation
5962-8604902ZX	BUS-63105II	1553 Single Ch. Dvr/Rec., Low Power	ILC Data Device Corporation
5962-8604903YX	ARX2402	1553 Single Ch. Dvr/Rec.	Aeroflex Laboratories Incorporated
5962-8604904UX	-----	1553 Single Ch. Dvr/Rec., Low Power	NO APPROVED SOURCE
5962-8604905XX	-----	1553 Single Ch. Dvr/Rec.	NO APPROVED SOURCE
5962-8604905XX	-----	1553 Single Ch. Dvr/Rec.	NO APPROVED SOURCE
5962-8604906TX	-----	1553 Single Ch. Dvr/Rec.	NO APPROVED SOURCE
5962-8604906YX	NHI-1509	1553 Single Ch. Dvr/Rec.	National Hybrid Incorporated
5962-8604907XX	-----	1553 Single Ch. Dvr/Rec.	NO APPROVED SOURCE
5962-8753501XX	BUS-65112	1553 Remote Terminal Unit, Dual Red.	ILC Data Device Corporation
5962-8753501YX	BUS-65117	1553 Remote Terminal Unit, Dual Red.	ILC Data Device Corporation
5962-8753502XX	-----	1553 Remote Terminal Unit, Dual Red.	NO APPROVED SOURCE
5962-8753502YX	-----	1553 Remote Terminal Unit, Dual Red.	NO APPROVED SOURCE
5962-8757901XX	-----	1553 Dual Ch. Dvr/Rec., -15V	NO APPROVED SOURCE
5962-8757901YX	-----	1553 Dual Ch. Dvr/Rec., -15V	NO APPROVED SOURCE
5962-8757902XX	BUS-63125II	1553 Dual Ch. Dvr/Rec., Low Pwr -15V	ILC Data Device Corporation
5962-8757902YX	BUS-63126II	1553 Dual Ch. Dvr/Rec., Low Pwr -15V	ILC Data Device Corporation
5962-8757903XX	-----	1553 Dual Ch. Dvr/Rec., -15V	NO APPROVED SOURCE
5962-8757903YX	-----	1553 Dual Ch. Dvr/Rec., -15V	NO APPROVED SOURCE
5962-8757904XX	-----	1553 Dual Ch. Dvr/Rec., Low Pwr -15V	NO APPROVED SOURCE
5962-8757904YX	-----	1553 Dual Ch. Dvr/Rec., Low Pwr -15V	NO APPROVED SOURCE
5962-8757905XX	-----	1553 Dual Ch. Dvr/Rec., Low Pwr -15V	NO APPROVED SOURCE
5962-8757905YX	-----	1553 Dual Ch. Dvr/Rec., Low Pwr -15V	NO APPROVED SOURCE
5962-8757906XX	-----	1553 Dual Ch. Dvr/Rec., Low Pwr -15V	NO APPROVED SOURCE
5962-8757906YX	-----	1553 Dual Ch. Dvr/Rec., Low Pwr -15V	NO APPROVED SOURCE
5962-8757907XX	-----	1553 Dual Ch. Dvr/Rec., Low Pwr -15V	NO APPROVED SOURCE

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HYBRID MICROCIRCUITS
QML-38534-12

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SOURCE(S)
5962-8757907YX	---	1553 Dual Ch. Drvr/Rec, Low Pwr -15V	NO APPROVED SOURCE
5962-8757908XX	MR63125MPR	1553 Dual Ch. Drvr/Rec, Low Pwr -15V	Micro-Rel
5962-8757908YX	---	1553 Dual Ch. Drvr/Rec, Low Pwr -15V	NO APPROVED SOURCE
5962-87617010XX	CTS00061B	Driver, High Voltage, 1.5 Amp.	CTS Corporation
5962-87617020XX	CTS00081B	Driver, High Voltage, 3.0 Amp.	CTS Corporation
5962-87620010XX	---	Op Amp, High Power	NO APPROVED SOURCE
5962-87632010XX	---	1553 Remote Term., Dual Red., Low Pwr.	NO APPROVED SOURCE
5962-8767901EX	4N55/883B	Optocoupler, Dual Channel	Hewlett-Packard Company
5962-8767902PX	HCPL-5531	Optocoupler, Dual Channel	Hewlett-Packard Company
5962-87679032A	HCPL-6531	Optocoupler, Dual Channel	Hewlett-Packard Company
5962-87687010XX	HSDC-8920A-883B	R/S to Dig. Conv., 400Hz, +/-2.6 arcmin.	ILC Data Device Corporation
5962-87687020XX	HSDC-8920-883B	R/S to Dig. Conv., 400Hz, +/-4.0 arcmin.	ILC Data Device Corporation
5962-87688010XX	---	D/A Conv., 8-bit, 0 to 4V Output	NO APPROVED SOURCE
5962-8768801YX	MN3008HF/B	D/A Conv., 8-bit, 0 to 4V Output	Micronetworks Incorporated
5962-8768802YX	---	D/A Conv., 8-bit, -2 to +2V Output	NO APPROVED SOURCE
5962-8768802YX	MN3009HF/B	D/A Conv., 8-bit, -2 to +2V Output	Micronetworks Incorporated
5962-88508010XX	ADC-HX/883B	A/D Conv., 12-bit, 20 microseconds	Datel Incorporated
5962-8850802XX	ADC-HZ/883B	A/D Conv., 12-bit, 8 microseconds	Datel Incorporated
5962-88509010XX	AD390SD/883B	D/A Conv., 12-bit, bipolar, linear, quad	Analog Devices MED
5962-8850902XX	AD390TD/883B	D/A Conv., 12-bit, bipolar, linear, quad	Analog Devices MED
5962-88510010XX	AD394SD/883B	D/A Conv., 12-bit, quad, bipolar	Analog Devices MED
5962-8851002XX	AD394TD/883B	D/A Conv., 12-bit, quad, bipolar	Analog Devices MED
5962-8851003XX	AD395SD/883B	D/A Conv., 12-bit, quad	Analog Devices MED
5962-8851004XX	AD395TD/883B	D/A Conv., 12-bit, quad	Analog Devices MED
5962-88514010XX	---	12-bit data acq. sys., 8-ch. diff. inp.	NO APPROVED SOURCE
5962-8851402XX	---	12-bit data acq. sys., 16ch. sng-ended	NO APPROVED SOURCE
5962-8851402YX	---	12-bit data acq. sys., 16ch. sng-ended	NO APPROVED SOURCE
5962-88517010XX	DAC-02310-112	D/A Conv., 14-bit, deglitched	ILC Data Device Corporation
5962-8851701YX	DAC-02311-112	D/A Conv., 14-bit, deglitched	ILC Data Device Corporation
5962-8851702XX	DAC-02310-113	D/A Conv., 14-bit, deglitched	ILC Data Device Corporation
5962-8851702YX	DAC-02311-113	D/A Conv., 14-bit, deglitched	ILC Data Device Corporation
5962-88542010XX	ADC00300-112	D/A Conv., 12-bit, track/hold	ILC Data Device Corporation
5962-8854201YX	---	D/A Conv., 12-bit, track/hold	NO APPROVED SOURCE
5962-88579010XX	HOS-050A/883B	Video Op Amp, Fast Settling	Analog Devices Computer Labs Div.
5962-8857902XX	HOS-060SH/883B	Video Op Amp, Fast Settling	Analog Devices Computer Labs Div.
5962-88585010XX	BUS-65600-883B	1553 Bus Controller, RTU & Monitor	ILC Data Device Corporation
5962-8858501YX	---	1553 Bus Controller, RTU & Monitor	NO APPROVED SOURCE
5962-88586010XX	---	1553 to Microprocessor Interface	NO APPROVED SOURCE
5962-8858601YX	---	1553 to Microprocessor Interface	NO APPROVED SOURCE
5962-88629010XX	---	D/A Conv., 12-bit, Quad	NO APPROVED SOURCE
5962-88658010XX	AD578SD/883B	A/D Conv., 12-bit, High Speed	Analog Devices MED
5962-8865802XX	AD578TD/883B	A/D Conv., 12-bit, High Speed	Analog Devices MED
5962-8865803XX	AD578ZSD/883B	A/D Conv., 12-bit, High Speed	Analog Devices MED
5962-8865804XX	AD578ZTD/883B	A/D Conv., 12-bit, High Speed	Analog Devices MED
5962-88692010XX	BUS61553-883B	1553, BC/RTU/MT, Multiplexed Terminal	ILC Data Device Corporation
5962-8869201YX	BUS61563-883B	1553, BC/RTU/MT, Multiplexed Terminal	ILC Data Device Corporation

STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SOURCE(S)
5962-8869202XX	BUS61554-883B	1553, BC/RTU/MT, Multiplexed Terminal	ILC Data Device Corporation
5962-8869202YX	BUS61564-883B	1553, BC/RTU/MT, Multiplexed Terminal	ILC Data Device Corporation
5962-8869203XX	BUS61565-883B	1553, BC/RTU/MT, Multiplexed Terminal	ILC Data Device Corporation
5962-8869203YX	BUS61565-883B	1553, BC/RTU/MT, Multiplexed Terminal	ILC Data Device Corporation
5962-8869204XX	BUS61556-883B	1553, BC/RTU/MT, Multiplexed Terminal	ILC Data Device Corporation
5962-8870101XX	-----	Power Op Amp, High Current	NO APPROVED SOURCE
5962-8876801PX	HCPL-5201	Optocoupler, Single Channel, Hi Speed	Hewlett-Packard Company
5962-8876901PX	HCPL-5231	Optocoupler, Dual Channel, Hi Speed	Hewlett-Packard Company
5962-8876902XX	HCPL-6231	Optocoupler, Dual Channel, High Speed	Hewlett-Packard Company
5962-8877601XX	-----	A/D Conv., 8-bit, Flash	NO APPROVED SOURCE
5962-8944701HUX	-----	1553 Dual Ch. Drvr/Rec, Idle High	NO APPROVED SOURCE
5962-8944701HXX	-----	1553 Dual Ch. Drvr/Rec, Idle High	NO APPROVED SOURCE
5962-8944701HYZ	-----	1553 Dual Ch. Drvr/Rec, Idle High	NO APPROVED SOURCE
5962-8944701HZX	-----	1553 Dual Ch. Drvr/Rec, Idle High	NO APPROVED SOURCE
5962-8944702HXX	-----	1553 Dual Ch. Drvr/Rec, Idle High	NO APPROVED SOURCE
5962-8944702HYX	-----	1553 Dual Ch. Drvr/Rec, Idle High	NO APPROVED SOURCE
5962-8944703HXX	-----	1553 Dual Ch. Drvr/Rec, Idle High	NO APPROVED SOURCE
5962-8944703HYX	-----	1553 Dual Ch. Drvr/Rec, Idle High	NO APPROVED SOURCE
5962-8944704HXX	BUS631351I	1553 Dual Ch. Drvr/Rec, Idle High	ILC Data Device Corporation
5962-8944704HYX	BUS631361I	1553 Dual Ch. Drvr/Rec, Idle High	ILC Data Device Corporation
5962-8947701PX	HCPL-5761	1553 Dual Ch. Drvr/Rec, Idle High	Hewlett-Packard Company
5962-8949001XX	OM7509SC/883B	Optocoupler, AC/DC Logic Interface	Hewlett-Packard Company
5962-8949801XX	-----	Voltage Regulator, Dual, +15 & -15V	Omnirel Corporation
5962-8949802XX	-----	S/D Conv., 90V, 400Hz, 2 min. accuracy	NO APPROVED SOURCE
5962-8949901XX	-----	S/D Conv., 90V, 400Hz, 1 min. accuracy	NO APPROVED SOURCE
5962-8949902XX	-----	S/D Conv., 11.8V, 400Hz, 2 min. accrcy	NO APPROVED SOURCE
5962-8949903XX	-----	S/D Conv., 11.8V, 400Hz, 1 min. accrcy	NO APPROVED SOURCE
5962-8949904XX	SDC14560-605	S/D Conv., 11.8V, 400Hz, .80 HzBW, 2 min	ILC Data Device Corporation
5962-8949905XX	-----	S/D Conv., 11.8V, 400Hz, 2 min. accrcy	NO APPROVED SOURCE
5962-8949906XX	-----	S/D Conv., 11.8V, 400Hz, 1 min. accrcy	NO APPROVED SOURCE
5962-8950901XX	RGBDAC3808H/B	D/A Conv., Triple, 8-bit, Video RAM	Advanced Analog
5962-8952201XX	ARX-2453	1553 Transceiver, Dual Channel, 5V	NO APPROVED SOURCE
5962-8952202XX	ARX-2453FP	1553 Transceiver, Dual Channel, 5V	Aeroflex Laboratories Incorporated
5962-8952203XX	-----	1553 Transceiver, Dual Channel, 5V	Aeroflex Laboratories Incorporated
5962-8952203YX	-----	1553 Transceiver, Dual Channel, 5V	NO APPROVED SOURCE
5962-8952204XX	-----	1553 Transceiver, Dual Channel	NO APPROVED SOURCE
5962-8952205XX	-----	1553 Transceiver, Dual Channel	NO APPROVED SOURCE
5962-8952205YX	DAC-HBK/883B	D/A Conv., 12-bit, binary input	NO APPROVED SOURCE
5962-8952801XX	DAC-HBK-2/883B	D/A Conv., 12-bit, two's complmnt.	NO APPROVED SOURCE
5962-8952802XX	DAC-HPB/883B	D/A Conv., 16-bit, 0 to 10V & +/-5V Out	NO APPROVED SOURCE
5962-8953101HXX	DAC-HPB-1/883B	D/A Conv., 16-bit, +/- 10V Output	NO APPROVED SOURCE
5962-8953102HXX	-----	D/A Conv., 16-bit, +/- 10V Output	NO APPROVED SOURCE
5962-8953103HYX	-----	D/A Conv., 16-bit, 0 to +10V Output	NO APPROVED SOURCE
5962-8953104HYX	-----	D/A Conv., 16-bit, +/- 5V Output	NO APPROVED SOURCE

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STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SOURCE(S)
5962-8956301HXX	-----	A/D Conv., 16-bit, shrt.cycle 14-bit	NO APPROVED SOURCE
5962-8956302HXX	MN5291H/B	A/D Conv., 16-bit, shrt.cycle 13-bit	Micronetworks Incorporated
5962-8956501XX	-----	Sample/Hold Multiplexer, Dual 8-ch.	NO APPROVED SOURCE
5962-8956601HCX	HS9716TB	Sample/Hold Amp., 16-bit	Sipex Corporation
5962-8956901HXX	MN5295H/B	A/D Conv., 16-bit, High Speed	Micronetworks Incorporated
5962-8957001PX	HCPL-5401	Optocoupler, Single Ch., High Speed	Hewlett-Packard Company
5962-8957101PX	HCPL-5431	Optocoupler, Dual Ch., Hi Spd, Com Sup	Hewlett-Packard Company
5962-89571022X	HCPL-6431	Optocoupler, Dual Ch., Hi Spd, Sep Sup	Hewlett-Packard Company
5962-8957201EX	HCPL-1931	Optocoupler, Dual Ch., Line Receiver	Hewlett-Packard Company
5962-8958301YX	MN5200H/B	A/D Conv., 12-bit, 0 to -10V Int. Ref.	Micronetworks Incorporated
5962-8958302YX	MN5203H/B	A/D Conv., 12-bit, 0 to -10V Ext. Ref.	Micronetworks Incorporated
5962-8958303YX	MN5201H/B	A/D Conv., 12-bit, -5 to +5V Int. Ref.	Micronetworks Incorporated
5962-8958304YX	MN5204H/B	A/D Conv., 12-bit, -5 to +5V Ext. Ref.	Micronetworks Incorporated
5962-8958305YX	MN5202H/B	A/D Conv., 12-bit, -10 to -10V Int. Ref.	Micronetworks Incorporated
5962-8958306YX	MN5205H/B	A/D Conv., 12-bit, -10 to -10V Ext. Ref.	Micronetworks Incorporated
5962-8958307YX	MN5206H/B	A/D Conv., 12-bit, 0 to 10V Int. Ref.	Micronetworks Incorporated
5962-8958401YX	MN5210H/B	ADC, Hi Sp, 12-bit, 0 to -10V Int. Ref.	Micronetworks Incorporated
5962-8958402YX	MN5213H/B	ADC, Hi Sp, 12-bit, 0 to -10V Ext. Ref.	Micronetworks Incorporated
5962-8958403YX	MN5211H/B	ADC, Hi Spd, 12-bit, -5 to 5V Int. Ref.	Micronetworks Incorporated
5962-8958404YX	MN5214H/B	ADC, Hi Spd, 12-bit, -5 to 5V Ext. Ref.	Micronetworks Incorporated
5962-8958405YX	MN5212H/B	ADC, Hi Spd, 12-bit, -10 to 10V Int. Ref.	Micronetworks Incorporated
5962-8958406YX	MN5215H/B	ADC, Hi Spd, 12-bit, -10 to 10V Ext. Ref.	Micronetworks Incorporated
5962-8958407YX	MN5216H/B	ADC, Hi Spd, 12-bit, 0 to 10V Int. Ref.	Micronetworks Incorporated
5962-8959201XX	-----	1553 Driver/Rec., Single Ch., Low Pwr.	NO APPROVED SOURCE
5962-8959201YX	-----	1553 Driver/Rec., Single Ch., Low Pwr.	NO APPROVED SOURCE
5962-8959202XX	-----	Unv1 Driver/Rec., Single Ch., Low Pwr.	NO APPROVED SOURCE
5962-8959202YX	-----	Unv1 Driver/Rec., Single Ch., Low Pwr.	NO APPROVED SOURCE
5962-8959203XX	-----	1553 Driver/Rec., Single Ch., Low Pwr.	NO APPROVED SOURCE
5962-8959203YX	-----	1553 Driver/Rec., Single Ch., Low Pwr.	NO APPROVED SOURCE
5962-8959204XX	-----	Unv1 Driver/Rec., Single Ch., Low Pwr.	NO APPROVED SOURCE
5962-8959204YX	-----	Unv1 Driver/Rec., Single Ch., Low Pwr.	NO APPROVED SOURCE
5962-8959205XX	-----	1553 Driver/Rec., Single Ch., Low Pwr.	NO APPROVED SOURCE
5962-8959205YX	-----	1553 Driver/Rec., Single Ch., Low Pwr.	NO APPROVED SOURCE
5962-8959206XX	-----	1553 Driver/Rec., Single Ch., Low Pwr.	NO APPROVED SOURCE
5962-8959206YX	-----	1553 Driver/Rec., Single Ch., Low Pwr.	NO APPROVED SOURCE
5962-8959401XX	CLC231A8C	Op Amp, Wideband, High Speed	Comlinear Corporation
5962-8959501XX	5245H/B	A/D Conv, 12-bit, 0 to 5V	Micronetworks Incorporated
5962-8959501YX	5245H/B	A/D Conv, 12-bit, 0 to 5V	NO APPROVED SOURCE
5962-8959502XX	5245AH/B	A/D Conv, 12-bit, 0 to 5V, 3-state inp.	Micronetworks Incorporated
5962-8959502YX	5246H/B	A/D Conv, 12-bit, 0 to 5V, 3-state inp.	NO APPROVED SOURCE
5962-8959503XX	5246H/B	A/D Conv, 12-bit, +/-2.5V	Micronetworks Incorporated
5962-8959503YX	5246H/B	A/D Conv, 12-bit, +/-2.5V	NO APPROVED SOURCE
5962-8959504XX	5246AH/B	A/D Conv, 12-bit, +/-2.5V, 3-state inp.	Micronetworks Incorporated
5962-8959504YX	5246AH/B	A/D Conv, 12-bit, +/-2.5V, 3-state inp.	NO APPROVED SOURCE
5962-8965901XX	EL2004G/883B	Buffer Amp, FET in.	Elantec Incorporated
5962-8965901YX	-----	Buffer Amp, FET in.	NO APPROVED SOURCE

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STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SOURCE(S)
5962-8968301HXX	AHE2805S/HB	DC/DC Conv., 5V, 15W Out, Single Ch.	Advanced Analog
5962-8968301HZX	AHE2805SF/HB	DC/DC Conv., 5V, 15W Out, Single Ch.	Advanced Analog
5962-8968302HXX	AHE2805S/HB-SLV	DC/DC Conv., 5V, 15W Out, Single Ch.	Advanced Analog
5962-8968302HZX	AHE2805SF/HB-SLV	DC/DC Conv., 5V, 15W Out, Single Ch.	Advanced Analog
5962-8968303HXX	AHE2805S/HB-MSTR	DC/DC Conv., 5V, 15W Out, Single Ch.	Advanced Analog
5962-8968303HZX	AHE2805SF/HB-MSTR	DC/DC Conv., 5V, 15W Out, Single Ch.	Advanced Analog
5962-8971801XX	M3020H/B	D/A Conv., 8-bit, w/ input register	Micronetworks Incorporated
5962-8971801YX		D/A Conv., 8-bit, w/ input register	NO APPROVED SOURCE
5962-8978501PX	HCPL-5731	Optocoupler, Dual Ch., Common supplies	Hewlett-Packard Company
5962-89785022X	HCPL-6731	Optocoupler, Dual Ch., Separate supplies	Hewlett-Packard Company
5962-8981001PX	HCPL-5701	Optocoupler, Sngl Ch., Low Cur., Hi Gn.	Hewlett-Packard Company
5962-89813013X		Op Amp, Wideband, Fast Settling	NO APPROVED SOURCE
5962-8981301GX		Op Amp, Wideband, Fast Settling	NO APPROVED SOURCE
5962-8982601XX	BUS-63127II	Driver/Receiver, Dual Channel	ILC Data Device Corporation
5962-8982601YX	BUS-63128II	Driver/Receiver, Dual Channel	ILC Data Device Corporation
5962-8982602XX		Driver/Receiver, Dual Channel	NO APPROVED SOURCE
5962-8982603XX		Driver/Receiver, Dual Channel	NO APPROVED SOURCE
5962-8982603YX		Driver/Receiver, Dual Channel	NO APPROVED SOURCE
5962-8982604XX		Driver/Receiver, Dual Channel	NO APPROVED SOURCE
5962-8982604YX		Driver/Receiver, Dual Channel	NO APPROVED SOURCE
5962-8982605XX		Driver/Receiver, Dual Channel	NO APPROVED SOURCE
5962-8982605YX		Driver/Receiver, Dual Channel	NO APPROVED SOURCE
5962-8982606XX		Driver/Receiver, Dual Channel	NO APPROVED SOURCE
5962-8982606YX		Driver/Receiver, Dual Channel	NO APPROVED SOURCE
5962-8985801XX	CLC206ABC	Operational Amplifier, Wideband	Comlinear Corporation
5962-8990801XX		R/D Conv., 400Hz., 11.8V	NO APPROVED SOURCE
5962-8990802XX		R/D Conv., 400Hz., 11.8V	NO APPROVED SOURCE
5962-8990803XX		R/D Conv., 400Hz., 80Hz. BW, 11.8V	ILC Data Device Corporation
5962-8990804XX	SDC14565-616	R/D Conv., 400Hz, 11.8V, trimmed velocity	NO APPROVED SOURCE
5962-8990805XX		Resolver to Digital Conv., 11.8V	NO APPROVED SOURCE
5962-8991001XX	CLC200ABC	Operational Amp, Wideband, High Speed	Comlinear Corporation
5962-8991001YX	CLC220ABC	Operational Amplifier, Wideband	Comlinear Corporation
5962-8997901XX		A/D Converter, 8-bit, flash	NO APPROVED SOURCE
5962-9055101XX	SDC14567-111	R/D Conv., 1.0V, 400 Hz., LSB Acc.: 6 min.	ILC Data Device Corporation
5962-9055102XX	SDC14567-112	R/D Conv., 1.0V, 400 Hz., LSB Acc.: 4 min.	ILC Data Device Corporation
5962-9055103XX	SDC14567-114	R/D Conv., 1.0V, 400 Hz., LSB Acc.: 2 min.	ILC Data Device Corporation
5962-9055104XX	SDC14567-115	R/D Conv., 1.0V, 400 Hz., LSB Acc.: 1 min.	ILC Data Device Corporation
5962-9055105XX	SDC14569-111	R/D Conv., 1.0V, 400 Hz., LSB Acc.: 6 min.	ILC Data Device Corporation
5962-9055106XX	SDC14569-112	R/D Conv., 1.0V, 400 Hz., LSB Acc.: 4 min.	ILC Data Device Corporation
5962-9055107XX	SDC14569-114	R/D Conv., 1.0V, 400 Hz., LSB Acc.: 2 min.	ILC Data Device Corporation
5962-9055108XX	SDC14569-115	R/D Conv., 1.0V, 400 Hz., LSB Acc.: 1 min.	ILC Data Device Corporation
5962-9055401XX	HSDC-8915A-883B	R/D or S/D Converter, +/-2.6 arcmin acc	ILC Data Device Corporation
5962-9055402XX	HSDC-8915-883B	R/D or S/D Converter, +/-4.0 arcmin acc	ILC Data Device Corporation
5962-9063601HXX		Driver/Receiver, Dual Channel	NO APPROVED SOURCE
5962-9063601HYX		Driver/Receiver, Dual Channel	NO APPROVED SOURCE

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STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	PRODUCT TYPE/DESCRIPTION	SOURCE(S)
5962-9063602HXX	-----	Driver/Receiver, Dual Channel	NO APPROVED SOURCE
5962-9063603HXX	-----	Driver/Receiver, Dual Channel	NO APPROVED SOURCE
5962-9063603HXX	-----	Driver/Receiver, Dual Channel	NO APPROVED SOURCE
5962-9063604HXX	-----	Driver/Receiver, Dual Channel	NO APPROVED SOURCE
5962-9063801HXX	PA07M/883	Operational Amplifier, High Power	Apex Microtechnology Corporation
5962-9063801HXX	MIOP42114/883	Operational Amplifier, High Power	Micropac Industries Incorporated
5962-9065901HXX	PA12M/883	Operational Amplifier, Power	Apex Microtechnology Corporation
5962-9065901HXX	MIOP42109/883	Operational Amplifier, Power	Micropac Industries Incorporated
5962-9067901HXX	PA02M/883	Operational Amplifier, Power	Apex Microtechnology Corporation
5962-9070701HXX	SDC14500-635	S/D Converter, 400Hz, 11.8V, acc. +/- -2.6	ILC Data Device Corporation
5962-9070702HXX	SDC14500-636	S/D Converter, 400Hz, 11.8V, acc. +/- -4.0	ILC Data Device Corporation
5962-9070703HXX	SDC14502-605	S/D Converter, 60Hz, 90V, acc. +/- -2.6 arcmin	ILC Data Device Corporation
5962-9070704HXX	SDC14502-606	S/D Converter, 60Hz, 90V, acc. +/- -4.0 arcmin	ILC Data Device Corporation
5962-9072301HXX	PA08M/883	Operational Amplifier, High Power	Apex Microtechnology Corporation
5962-9072301HXX	MIOP42116/883	Operational Amplifier, High Power	Micropac Industries Incorporated
5962-9073001HXX	-----	Amplifier, Track & Hold, High Speed	NO APPROVED SOURCE
5962-9079501HXX	-----	A/D Converter, 16-bit, High Speed	NO APPROVED SOURCE
5962-9079502HXX	-----	A/D Converter, 16-bit, High Speed	NO APPROVED SOURCE
5962-9082801HXX	PA10M/883	Operational Amplifier, High Power	Apex Microtechnology Corporation
5962-9082801HXX	MIOP42115/883	Operational Amplifier, High Power	Micropac Industries Incorporated
5962-9082901HXX	-----	Driver/Receiver, Single Channel	NO APPROVED SOURCE
5962-9082902HXX	-----	Driver/Receiver, Single Channel	NO APPROVED SOURCE
5962-9082903HXX	-----	Driver/Receiver, Single Channel	NO APPROVED SOURCE
5962-9082904HXX	-----	Driver/Receiver, Single Channel	NO APPROVED SOURCE
5962-9082905HXX	-----	Driver/Receiver, Single Channel	NO APPROVED SOURCE
5962-9082906HXX	-----	Driver/Receiver, Single Channel	NO APPROVED SOURCE
5962-9082907HXX	-----	Driver/Receiver, Single Channel	NO APPROVED SOURCE
5962-9082908HXX	-----	Driver/Receiver, Single Channel	NO APPROVED SOURCE
5962-9082909HXX	-----	Driver/Receiver, Single Channel	NO APPROVED SOURCE
5962-9082910HXX	-----	Driver/Receiver, Single Channel	NO APPROVED SOURCE
5962-9162101HXX	HCPL-5501	Optocoupler, Single Ch., transistr out	Hewlett-Packard Company
5962-9162101HXX	PA83M/883	Operational Amplifier, Power	Apex Microtechnology Corporation
5962-9162501HXX	AHE2815S/HB	DC/DC Converter, Single Ch., 15V, 20W	Advanced Analog
5962-9162501HXX	AHE2815SF/HB	DC/DC Converter, Single Ch., 15V, 20W	Advanced Analog
5962-9162502HXX	AHE2815S/HB-SLV	DC/DC Converter, Single Ch., 15V, 20W	Advanced Analog
5962-9162502HXX	AHE2815SF/HB-SLV	DC/DC Converter, Single Ch., 15V, 20W	Advanced Analog
5962-9162503HXX	AHE2815S/HB-MSTR	DC/DC Converter, Single Ch., 15V, 20W	Advanced Analog
5962-9162503HXX	AHE2815SF/HB-MSTR	DC/DC Converter, Single Ch., 15V, 20W	Advanced Analog

TABLE II

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.

PRODUCT TYPE/DESCRIPTION	STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
1553 BUS CONTROL			
1553 Bus Controller, RTU & Monitor	5962-8858501XX	BUS-65600-883B	ILC Data Device Corporation NO APPROVED SOURCE
1553 Bus Controller, RTU & Monitor	5962-8858501XX	-----	NO APPROVED SOURCE
1553 BUS/MICROPROCESSOR INTERFACE			
1553 to Microprocessor Interface	5962-8858601XX	-----	NO APPROVED SOURCE
1553 to Microprocessor Interface	5962-8858601XX	-----	NO APPROVED SOURCE
1553 DUAL CHANNEL DRIVER/RECEIVER			
1553 Dual Ch. Drvr/Rec., -15V	5962-8757901XX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec., -15V	5962-8757901XX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec., Low Pwr -15V	5962-8757902XX	BUS-63125II	ILC Data Device Corporation
1553 Dual Ch. Drvr/Rec., Low Pwr -15V	5962-8757902XX	BUS-63126II	ILC Data Device Corporation
1553 Dual Ch. Drvr/Rec., -15V	5962-8757903XX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec., -15V	5962-8757903XX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec, Low Pwr -15V	5962-8757904XX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec, Low Pwr -15V	5962-8757904XX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec, Low Pwr -15V	5962-8757905XX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec, Low Pwr -15V	5962-8757905XX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec, Low Pwr -15V	5962-8757906XX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec, Low Pwr -15V	5962-8757906XX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec, Low Pwr -15V	5962-8757907XX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec, Low Pwr -15V	5962-8757907XX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec, Low Pwr -15V	5962-8757908XX	MRG3125MPR	Micro-Rel
1553 Dual Ch. Drvr/Rec, Low Pwr -15V	5962-8757908XX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec, Idle High	5962-8944701HXX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec, Idle High	5962-8944701HXX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec, Idle High	5962-8944701HXX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec, Idle High	5962-8944701HZX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec, Idle High	5962-8944702HXX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec, Idle High	5962-8944702HXX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec, Idle High	5962-8944703HXX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec, Idle High	5962-8944703HXX	-----	NO APPROVED SOURCE
1553 Dual Ch. Drvr/Rec, Idle High	5962-8944704HXX	BUS63135II	ILC Data Device Corporation
1553 Dual Ch. Drvr/Rec, Idle High	5962-8944704HXX	BUS63136II	ILC Data Device Corporation

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PRODUCT TYPE/DESCRIPTION	STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
1553 SINGLE CHANNEL DRIVER/RECEIVER			
1553 Single Ch. Dvr/Rec., Low Power	5962-8604904UX	-----	NO APPROVED SOURCE
1553 Single Ch. Dvr/Rec.	5962-8604905XX	-----	NO APPROVED SOURCE
1553 Single Ch. Dvr/Rec.	5962-8604906XX	-----	NO APPROVED SOURCE
1553 Single Ch. Dvr/Rec.	5962-8604906YX	-----	NO APPROVED SOURCE
1553 Single Ch. Dvr/Rec.	5962-8604907XX	NHI-1509	National Hybrid Incorporated
1553 Driver/Rec., Single Ch., Low Pwr.	5962-8959201XX	-----	NO APPROVED SOURCE
1553 Driver/Rec., Single Ch., Low Pwr.	5962-8959201YX	-----	NO APPROVED SOURCE
1553 Driver/Rec., Single Ch., Low Pwr.	5962-8959203XX	-----	NO APPROVED SOURCE
1553 Driver/Rec., Single Ch., Low Pwr.	5962-8959203YX	-----	NO APPROVED SOURCE
1553 Driver/Rec., Single Ch., Low Pwr.	5962-8959205XX	-----	NO APPROVED SOURCE
1553 Driver/Rec., Single Ch., Low Pwr.	5962-8959205YX	-----	NO APPROVED SOURCE
1553 Driver/Rec., Single Ch., Low Pwr.	5962-8959206XX	-----	NO APPROVED SOURCE
1553 Driver/Rec., Single Ch., Low Pwr.	5962-8959206YX	-----	NO APPROVED SOURCE
1553 Driver/Receiver, Single Channel	5962-9082901HXX	-----	NO APPROVED SOURCE
1553 Driver/Receiver, Single Channel	5962-9082902HXX	-----	NO APPROVED SOURCE
1553 Driver/Receiver, Single Channel	5962-9082903HUX	-----	NO APPROVED SOURCE
1553 Driver/Receiver, Single Channel	5962-9082904HUX	-----	NO APPROVED SOURCE
1553 Driver/Receiver, Single Channel	5962-9082905HTX	-----	NO APPROVED SOURCE
1553 Driver/Receiver, Single Channel	5962-9082905HYX	-----	NO APPROVED SOURCE
1553 Driver/Receiver, Single Channel	5962-9082906HXX	-----	NO APPROVED SOURCE
1553 Driver/Receiver, Single Channel	5962-9082907HTX	-----	NO APPROVED SOURCE
1553 Driver/Receiver, Single Channel	5962-9082907HXX	-----	NO APPROVED SOURCE
1553 Driver/Receiver, Single Channel	5962-9082907HYX	-----	NO APPROVED SOURCE
1553 Driver/Receiver, Single Channel	5962-9082908HXX	-----	NO APPROVED SOURCE
1553 Driver/Receiver, Single Channel	5962-9082908HYX	-----	NO APPROVED SOURCE
1553 TRANSCEIVER			
1553 Transceiver, Dual Channel, 5V	5962-8952201YX	-----	NO APPROVED SOURCE
1553 Transceiver, Dual Channel, 5V	5962-8952202XX	ARX-2453	Aeroflex Laboratories Incorporated
1553 Transceiver, Dual Channel, 5V	5962-8952202YX	ARX-2453FP	Aeroflex Laboratories Incorporated
1553 Transceiver, Dual Channel, 5V	5962-8952203XX	-----	NO APPROVED SOURCE
1553 Transceiver, Dual Channel, 5V	5962-8952203YX	-----	NO APPROVED SOURCE
1553 Transceiver, Dual Channel	5962-8952204XX	-----	NO APPROVED SOURCE
1553 Transceiver, Dual Channel	5962-8952205XX	-----	NO APPROVED SOURCE
1553 Transceiver, Dual Channel	5962-8952205YX	-----	NO APPROVED SOURCE
UNIVERSAL DRIVER/RECEIVER			
Unv1 Driver/Rec., Single Ch., Low Pwr.	5962-8959202XX	-----	NO APPROVED SOURCE
Unv1 Driver/Rec., Single Ch., Low Pwr.	5962-8959202YX	-----	NO APPROVED SOURCE
Unv1 Driver/Rec., Single Ch., Low Pwr.	5962-8959204XX	-----	NO APPROVED SOURCE

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PRODUCT TYPE/DESCRIPTION	STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
UNIVERSAL DRIVER/RECEIVER	5962-895204YX	---	NO APPROVED SOURCE
Unv1 Driver/Rec., Single Ch., Low Pwr.			
AMPLIFIER, CURRENT	7801301GX	CTS0002	CTS Corporation
Amplifier, current, thick/thin film	7801301XX	CTS0002XB	CTS Corporation
Amplifier, current, thick/thin film	7801301XX	ELH0002H/883B	Elantec Incorporated
Amplifier, current, thick film	7801301XX	LH0002H/883B	National Semiconductor Corporation
AMPLIFIER, TRACK AND HOLD	5962-9073001HXX	---	NO APPROVED SOURCE
Amplifier, Track & Hold, High Speed			
ANALOG/DIGITAL CONVERTER	5962-8850801XX	ADC-HX/883B	Datel Incorporated
A/D Conv., 12-bit, 20 microseconds	5962-8850802XX	ADC-HZ/883B	Datel Incorporated
A/D Conv., 12-bit, 8 microseconds	5962-8865801XX	AD578SD/883B	Analog Devices MED
A/D Conv., 12-bit, High Speed	5962-8865802XX	AD578TD/883B	Analog Devices MED
A/D Conv., 12-bit, High Speed	5962-8865803XX	AD578SD/883B	Analog Devices MED
A/D Conv., 12-bit, High Speed	5962-8865804XX	AD578TD/883B	Analog Devices MED
A/D Conv., 8-bit, Flash	5962-8877601XX	---	NO APPROVED SOURCE
A/D Conv., 16-bit, shrt.cycle 14-bit	5962-8956301HXX	---	NO APPROVED SOURCE
A/D Conv., 16-bit, shrt.cycle 13-bit	5962-8956302HXX	MN5291H/B	Micronetworks Incorporated
A/D Conv., 16-bit, High Speed	5962-8956901HXX	MN5295H/B	Micronetworks Incorporated
A/D Conv., 12-bit, 0 to -10V Int. Ref.	5962-8958301YX	MN5200H/B	Micronetworks Incorporated
A/D Conv., 12-bit, 0 to -10V Ext. Ref.	5962-8958302YX	MN5203H/B	Micronetworks Incorporated
A/D Conv., 12-bit, -5 to +5V Int. Ref.	5962-8958303YX	MN5201H/B	Micronetworks Incorporated
A/D Conv., 12-bit, -5 to +5V Ext. Ref.	5962-8958304YX	MN5204H/B	Micronetworks Incorporated
A/D Conv., 12-bit, -10 to -10V Int. Ref.	5962-8958305YX	MN5202H/B	Micronetworks Incorporated
A/D Conv., 12-bit, 0 to -10V Ext. Ref.	5962-8958306YX	MN5205H/B	Micronetworks Incorporated
A/D Conv., 12-bit, 0 to 10V Int. Ref.	5962-8958307YX	MN5206H/B	Micronetworks Incorporated
ADC, Hi Sp, 12-bit, 0 to -10V Int. Ref.	5962-8958401YX	MN5210H/B	Micronetworks Incorporated
ADC, Hi Sp, 12-bit, 0 to -10V Ext. Ref.	5962-8958402YX	MN5213H/B	Micronetworks Incorporated
ADC, Hi Spd, 12-bit, -5 to 5V Int. Ref.	5962-8958403YX	MN5211H/B	Micronetworks Incorporated
ADC, Hi Spd, 12-bit, -5 to 5V Ext. Ref.	5962-8958404YX	MN5214H/B	Micronetworks Incorporated
ADC, Hi Spd, 12-bit, -10 to 10V Int. Ref.	5962-8958405YX	MN5212H/B	Micronetworks Incorporated
ADC, Hi Spd, 12-bit, -10 to 10V Ext. Ref.	5962-8958406YX	MN5215H/B	Micronetworks Incorporated
A/D Conv, 12-bit, 0 to 5V	5962-8959501XX	MN5216H/B	Micronetworks Incorporated
A/D Conv, 12-bit, 0 to 5V	5962-8959501YX	5245H/B	NO APPROVED SOURCE
A/D Conv, 12-bit, 0 to 5V, 3-state inp.	5962-8959502XX	5245AH/B	Micronetworks Incorporated
A/D Conv, 12-bit, 0 to 5V, 3-state inp.	5962-8959502YX	---	NO APPROVED SOURCE
A/D Conv, 12-bit, +/-2.5V	5962-8959503XX	5246H/B	Micronetworks Incorporated

PRODUCT TYPE/DESCRIPTION	STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
ANALOG/DIGITAL CONVERTER			
A/D Conv, 12-bit, +/-2.5V	5962-8959503YX	-----	NO APPROVED SOURCE
A/D Conv, 12-bit, +/-2.5V, 3-state inp.	5962-8959504XX	5246AH/B	Micronetworks Incorporated
A/D Conv, 12-bit, +/-2.5V, 3-state inp.	5962-8959504YX	-----	NO APPROVED SOURCE
A/D Converter, 8-bit, flash	5962-8997901YX	-----	NO APPROVED SOURCE
A/D Converter, 16-bit, High Speed	5962-9079501HXX	-----	NO APPROVED SOURCE
A/D Converter, 16-bit, High Speed	5962-9079502HXX	-----	NO APPROVED SOURCE
DATA ACQUISITION SYSTEM			
12-bit data acq. sys., 8-ch. diff.inp.	5962-8851401XX	-----	NO APPROVED SOURCE
12-bit data acq. sys., 16ch. sng-ended	5962-8851402XX	-----	NO APPROVED SOURCE
12-bit data acq. sys., 16ch. sng-ended	5962-8851402YX	-----	NO APPROVED SOURCE
DC/DC CONVERTERS			
DC/DC Conv., 5V, 15W Out, Single Ch.	5962-8968301HXX	AHE2805S/HB	Advanced Analog
DC/DC Conv., 5V, 15W Out, Single Ch.	5962-8968301HZX	AHE2805SF/HB	Advanced Analog
DC/DC Conv., 5V, 15W Out, Single Ch.	5962-8968302HXX	AHE2805S/HB-SLV	Advanced Analog
DC/DC Conv., 5V, 15W Out, Single Ch.	5962-8968302HZX	AHE2805SF/HB-SLV	Advanced Analog
DC/DC Conv., 5V, 15W Out, Single Ch.	5962-8968303HXX	AHE2805S/HB-MSTR	Advanced Analog
DC/DC Conv., 5V, 15W Out, Single Ch.	5962-8968303HZX	AHE2805SF/HB-MSTR	Advanced Analog
DC/DC Converter, Single Ch., 15V, 20W	5962-9162501HXX	AHE2815S/HB	Advanced Analog
DC/DC Converter, Single Ch., 15V, 20W	5962-9162501HZX	AHE2815SF/HB	Advanced Analog
DC/DC Converter, Single Ch., 15V, 20W	5962-9162502HXX	AHE2815S/HB-SLV	Advanced Analog
DC/DC Converter, Single Ch., 15V, 20W	5962-9162502HZX	AHE2815SF/HB-SLV	Advanced Analog
DC/DC Converter, Single Ch., 15V, 20W	5962-9162503HXX	AHE2815S/HB-MSTR	Advanced Analog
DC/DC Converter, Single Ch., 15V, 20W	5962-9162503HZX	AHE2815SF/HB-MSTR	Advanced Analog
DIGITAL/ANALOG CONVERTER			
D/A Conv., 12-bit, Programmable	8300201JX	DAC87CBI	Analog Devices MED
D/A Conv., 12-bit, Programmable	8300201XX	-----	NO APPROVED SOURCE
D/A Conv., 8-bit, 0 to 4V Output	5962-8768801XX	-----	NO APPROVED SOURCE
D/A Conv., 8-bit, 0 to 4V Output	5962-8768801YX	MN3008HF/B	Micronetworks Incorporated
D/A Conv., 8-bit, -2 to +2V Output	5962-8768802XX	-----	NO APPROVED SOURCE
D/A Conv., 8-bit, -2 to +2V Output	5962-8768802YX	MN3009HF/B	Micronetworks Incorporated
D/A Conv., 12-bit, bipolar, linear, quad	5962-8850901XX	AD390SD/883B	Analog Devices MED
D/A Conv., 12-bit, bipolar, linear, quad	5962-8850902XX	AD390TD/883B	Analog Devices MED
D/A Conv., 12-bit, quad, bipolar	5962-8851001XX	AD394SD/883B	Analog Devices MED
D/A Conv., 12-bit, quad, bipolar	5962-8851002XX	AD394TD/883B	Analog Devices MED
D/A Conv., 12-bit, quad	5962-8851003XX	AD395SD/883B	Analog Devices MED
D/A Conv., 12-bit, quad	5962-8851004XX	AD395TD/883B	Analog Devices MED
D/A Conv., 14-bit, deglitched	5962-8851701XX	DAC-02310-112	ILC Data Device Corporation
D/A Conv., 14-bit, deglitched	5962-8851701YX	DAC-02311-112	ILC Data Device Corporation

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QML-38534-12

PRODUCT TYPE/DESCRIPTION	STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
DIGITAL/ANALOG CONVERTER			
D/A Conv., 14-bit, deglitched	5962-8851702XX	DAC-02310-113	IILC Data Device Corporation
D/A Conv., 14-bit, deglitched	5962-8851702YX	DAC-02311-113	IILC Data Device Corporation
D/A Conv., 12-bit, track/hold	5962-8854201XX	ADC00300-112	IILC Data Device Corporation
D/A Conv., 12-bit, track/hold	5962-8854201YX	-----	NO APPROVED SOURCE
D/A Conv., 12-bit, Quad	5962-8862901XX	-----	NO APPROVED SOURCE
D/A Conv., Triple, 8-bit, Video RAM	5962-8950901XX	RGBDAC3808H/B	Advanced Analog
D/A Conv., 12-bit, binary input	5962-8952801XX	DAC-HBK/883B	Datel Incorporated
D/A Conv., 12-bit, two's complmt.	5962-8952802XX	DAC-HBK-2/883B	Datel Incorporated
D/A Conv., 16-bit, 0 to 10V & +/-5V Out	5962-8953101XX	DAC-HPB/883B	Datel Incorporated
D/A Conv., 16-bit, +/- 10V Output	5962-8953102HXX	DAC-HPB-1/883B	Datel Incorporated
D/A Conv., 16-bit, +/- 10V Output	5962-8953102YX	-----	NO APPROVED SOURCE
D/A Conv., 16-bit, 0 to +10V Output	5962-8953103HXX	-----	NO APPROVED SOURCE
D/A Conv., 16-bit, +/- 5V Output	5962-8953104YX	-----	NO APPROVED SOURCE
D/A Conv., 8-bit, w/ input register	5962-8971801XX	MN3020H/B	Micronetworks Incorporated
D/A Conv., 8-bit, w/ input register	5962-8971801YX	-----	NO APPROVED SOURCE
DRIVER, HIGH VOLTAGE			
Driver, High Voltage, 1.5 Amp.	5962-8761701XX	CTS00061B	CTS Corporation
Driver, High Voltage, 3.0 Amp.	5962-8761702XX	CTS00081B	CTS Corporation
OPERATIONAL AMPLIFIER			
Op amp, thick film	8001301ZX	ADLH0032G/883B	Analog Devices Computer Labs Div.
Op amp, thick film	8001301ZX	CTS0032ZB	CTS Corporation
Op amp, thick film	8001301ZX	ELH0032G/883E10003	Elaantec Incorporated
Op amp, thick film	8001301ZX	-----	NO APPROVED SOURCE
Op amp, thick film	8001301ZX	LH0032G	National Semiconductor Corporation
Op Amp, Wideband, High Speed	5962-8959401XX	CLC231A8C	Comlinear Corporation
Op Amp, Wideband, Fast Settling	5962-89813013X	-----	NO APPROVED SOURCE
Op Amp, Wideband, Fast Settling	5962-8981301GX	-----	NO APPROVED SOURCE
Operational Amplifier, Wideband	5962-8985801XX	CLC206ABC	Comlinear Corporation
Operational Amp, Wideband, High Speed	5962-8991001XX	CLC200ABC	Comlinear Corporation
Operational Amplifier, Wideband	5962-8991101XX	CLC220ABC	Comlinear Corporation
POWER OPERATIONAL AMPLIFIER			
Hi Pwr. Op Amp, Ext. Comp., 0.2A Out.	8508701ZX	CTS00412BNEW	CTS Corporation
Hi Pwr. Op Amp, Ext. Comp., 0.2A Out.	8508701ZX	ELH0041G/883B	Elaantec Incorporated
Hi Pwr. Op Amp, Ext. Comp., 0.2A Out.	8508701ZX	LH0041G/883	National Semiconductor Corporation
Hi Pwr. Op Amp., Ext. Comp., 1.0A Out.	8508801YX	CTS00212B	CTS Corporation
Hi Pwr. Op Amp, Ext. Comp., 1.0A Out.	8508801YX	ELH0021K/E10036	Elaantec Incorporated
Hi Pwr. Op Amp, Ext. Comp., 1.0A Out.	8508801YX	LH0021K	National Semiconductor Corporation
Power Op amp., Wideband, Thick Film	8508901YX	ELH0101AK/E10039	Elaantec Incorporated

PRODUCT TYPE/DESCRIPTION	STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
POWER OPERATIONAL AMPLIFIER			
Power Op Amp., Wideband, Thick Film Op Amp, High Power	8508902YX	ELH0101K/E10038	Elantec Incorporated
Power Op Amp, High Current	5962-8762001XX	-----	NO APPROVED SOURCE
Operational Amplifier, High Power	5962-8870101XX	-----	NO APPROVED SOURCE
Operational Amplifier, High Power	5962-9063801HXX	PA07M/883	Apex Microtechnology Corporation
Operational Amplifier, Power	5962-9063801HXX	MIOP42114/883	Micropac Industries Incorporated
Operational Amplifier, Power	5962-9065901HXX	PA12M/883	Apex Microtechnology Corporation
Operational Amplifier, Power	5962-9065901HXX	MIOP42109/883	Micropac Industries Incorporated
Operational Amplifier, High Power	5962-9067901HXX	PA02M/883	Apex Microtechnology Corporation
Operational Amplifier, High Power	5962-9072301HXX	PA08M/883	Apex Microtechnology Corporation
Operational Amplifier, High Power	5962-9072301HXX	MIOP42116/883	Micropac Industries Incorporated
Operational Amplifier, High Power	5962-9082801HXX	PA10M/883	Apex Microtechnology Corporation
Operational Amplifier, High Power	5962-9082801HXX	MIOP42115/883	Micropac Industries Incorporated
Operational Amplifier, Power	5962-9162101HXX	PA83M/883	Apex Microtechnology Corporation
VIDEO OPERATIONAL AMPLIFIER			
Video Op Amp, Fast Settling	5962-8857901XX	HOS-050A/883B	Analog Devices Computer Labs Div.
Video Op Amp, Fast Settling	5962-8857902XX	HOS-060SH/883B	Analog Devices Computer Labs Div.
OPTOCOUPLER			
Optocoupler, Dual Channel	8102801EX	6N134/883B	Hewlett-Packard Company
Optocoupler, Dual Channel	8102801EX	6N134/883B	Micropac Industries Incorporated
Optocoupler, Quad	8302401EX	6N140A/883B	Hewlett-Packard Company
Optocoupler, Quad	8302401EX	6N140A/883B	Micropac Industries Incorporated
Optocoupler, Dual Channel	5962-8767901EX	4N55/883B	Hewlett-Packard Company
Optocoupler, Dual Channel	5962-8767902PX	HCPL-5531	Hewlett-Packard Company
Optocoupler, Dual Channel	5962-87679032A	HCPL-6531	Hewlett-Packard Company
Optocoupler, Single Channel, Hi Speed	5962-8876801PX	HCPL-5201	Hewlett-Packard Company
Optocoupler, Hi Speed	5962-8876901PX	HCPL-5231	Hewlett-Packard Company
Optocoupler, High Speed	5962-88769022X	HCPL-6231	Hewlett-Packard Company
Optocoupler, AC/DC Logic Interface	5962-8947701PX	HCPL-5761	Hewlett-Packard Company
Optocoupler, High Speed	5962-8957001PX	HCPL-5401	Hewlett-Packard Company
Optocoupler, Hi Spd, Com Sup	5962-8957101PX	HCPL-5431	Hewlett-Packard Company
Optocoupler, Hi Spd, Sep Sup	5962-89571022X	HCPL-6431	Hewlett-Packard Company
Optocoupler, Line Receiver	5962-8957201EX	HCPL-1931	Hewlett-Packard Company
Optocoupler, Common supplies	5962-8978501PX	HCPL-5731	Hewlett-Packard Company
Optocoupler, Separate supplies	5962-89785022X	HCPL-6731	Hewlett-Packard Company
Optocoupler, Sngl Ch., Low Cur., Hi Gn.	5962-8981001PX	HCPL-5701	Hewlett-Packard Company
Optocoupler, Single Ch., transistr out	5962-9085401HPX	HCPL-5501	Hewlett-Packard Company
R/D CONVERTERS		-----	NO APPROVED SOURCE
R/D Conv., 400Hz., 11.8V	5962-8990801XX		

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PRODUCT TYPE/DESCRIPTION	STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
R/D CONVERTERS			
R/D Conv., 400Hz., 11.8V	5962-8990802XX	-----	NO APPROVED SOURCE
R/D Conv., 400Hz., 80Hz. BW, 11.8V	5962-8990803XX	SDC14565-616	ILC Data Device Corporation
R/D Conv., 400Hz., 11.8V, trimmed velocity	5962-8990804XX	-----	NO APPROVED SOURCE
Resolver to Digital Conv., 11.8V	5962-8990805XX	-----	NO APPROVED SOURCE
R/D Conv., 1.0V, 400 Hz., LSB Acc.: 6 min.	5962-9055101XX	SDC14567-111	ILC Data Device Corporation
R/D Conv., 1.0V, 400 Hz., LSB Acc.: 4 min.	5962-9055102XX	SDC14567-112	ILC Data Device Corporation
R/D Conv., 1.0V, 400 Hz., LSB Acc.: 2 min.	5962-9055103XX	SDC14567-114	ILC Data Device Corporation
R/D Conv., 1.0V, 400 Hz., LSB Acc.: 1 min.	5962-9055104XX	SDC14567-115	ILC Data Device Corporation
R/D Conv., 1.0V, 400 Hz., LSB Acc.: 6 min.	5962-9055105XX	SDC14569-111	ILC Data Device Corporation
R/D Conv., 1.0V, 400 Hz., LSB Acc.: 4 min.	5962-9055106XX	SDC14569-112	ILC Data Device Corporation
R/D Conv., 1.0V, 400 Hz., LSB Acc.: 2 min.	5962-9055107XX	SDC14569-114	ILC Data Device Corporation
R/D Conv., 1.0V, 400 Hz., LSB Acc.: 1 min.	5962-9055108XX	SDC14569-115	ILC Data Device Corporation
R/S TO DIGITAL CONVERTERS			
R/S to Dig. Conv., 400Hz., +/-2.6 arcmin.	5962-8768701XX	HSDC-8920A-883B	ILC Data Device Corporation
R/S to Dig. Conv., 400Hz., +/-4.0 arcmin.	5962-8768702XX	HSDC-8920-883B	ILC Data Device Corporation
R/D or S/D Converter, +/-2.6 arcmin acc	5962-9055401XX	HSDC-8915A-883B	ILC Data Device Corporation
R/D or S/D Converter, +/-4.0 arcmin acc	5962-9055402XX	HSDC-8915-883B	ILC Data Device Corporation
REFERENCE, PRECISION VOLTAGE			
Reference, Precision Voltage, +10V	85030013X	-----	NO APPROVED SOURCE
Reference, Precision Voltage, +10V	8503001CX	-----	NO APPROVED SOURCE
Reference, Precision Voltage, +10V	8503001XX	2700SD/883B	Analog Devices MED
Reference, Precision Voltage, +10V	8503001YX	2700SD/883B	Analog Devices MED
Reference, Precision Voltage, +10V	8503001YX	HC2700SD/883B	Hycomp Incorporated
Reference, Precision Voltage, +10V	85030023X	-----	NO APPROVED SOURCE
Reference, Precision Voltage, +10V	8503002CX	-----	NO APPROVED SOURCE
Reference, Precision Voltage, +10V	8503002XX	2700UD/883B	Analog Devices MED
Reference, Precision Voltage, +10V	8503002YX	2700UD/883B	Analog Devices MED
Reference, Precision Voltage, +10V	8503002YX	HC2700UD/883B	Hycomp Incorporated
Reference, Precision Voltage, -10V	85030033X	-----	NO APPROVED SOURCE
Reference, Precision Voltage, -10V	8503003CX	-----	NO APPROVED SOURCE
Reference, Precision Voltage, -10V	8503003XX	2701SD/883B	Analog Devices MED
Reference, Precision Voltage, -10V	8503003YX	2702SD/883B	Analog Devices MED
Reference, Precision Voltage, -10V	8503003YX	HC2702SD/883B	Hycomp Incorporated
Reference, Precision Voltage, +/-10V	85030043X	-----	NO APPROVED SOURCE
Reference, Precision Voltage, +/-10V	8503004CX	-----	NO APPROVED SOURCE
Reference, Precision Voltage, +/-10V	8503004XX	2702SD/883B	Analog Devices MED
Reference, Precision Voltage, +/-10V	8503004YX	2702UD/883B	Analog Devices MED
Reference, Precision Voltage, +/-10V	8503004YX	HC2702UD/883B	Hycomp Incorporated
Reference, Precision Voltage, +/-10V	85030053X	-----	NO APPROVED SOURCE
Reference, Precision Voltage, +/-10V	8503005CX	-----	NO APPROVED SOURCE

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PRODUCT TYPE/DESCRIPTION	STANDARDIZED MILITARY DRAWING (SMD)	MANUFACTURER SIMILAR PART NUMBER 4/	SOURCE(S)
REFERENCE, PRECISION VOLTAGE	8503005YX 8503005YX 85030063X 8503006CX 8503006YX 8503006YX	2701SD/883B HC2701SD/883B ----- ----- 2701UD/883B HC2701UD/883B	Analog Devices MED Hycomp Incorporated NO APPROVED SOURCE NO APPROVED SOURCE Analog Devices MED Hycomp Incorporated
S/D CONVERTERS	5962-8949801XX 5962-8949802XX 5962-8949901XX 5962-8949902XX 5962-8949903XX 5962-8949904XX 5962-8949905XX 5962-8949906XX 5962-9070701HXX 5962-9070702HXX 5962-9070703HXX 5962-9070704HXX	----- ----- ----- ----- ----- ----- ----- ----- SDC14560-605 ----- ----- SDC14500-635 SDC14500-636 SDC14502-605 SDC14502-606	NO APPROVED SOURCE NO APPROVED SOURCE NO APPROVED SOURCE NO APPROVED SOURCE ILC Data Device Corporation NO APPROVED SOURCE NO APPROVED SOURCE NO APPROVED SOURCE ILC Data Device Corporation ILC Data Device Corporation ILC Data Device Corporation ILC Data Device Corporation
SAMPLE/HOLD	5962-8956501XX 5962-8956601HCX	----- HS9716TB	NO APPROVED SOURCE Sipex Corporation
VOLTAGE FOLLOWER	8001401ZX 8001401ZX 8001401ZX 8001401ZX 8001401ZX 5962-8965901XX 5962-8965901YX	ADLH0033G/883B CTS0033ZB *ELH0033G/883B LH0033G TP0033-83 EL2004G/883B -----	Analog Devices Computer Labs Div. CTS Corporation Elantec Incorporated National Semiconductor Corporation Teledyne Components Elantec Incorporated NO APPROVED SOURCE
VOLTAGE REGULATOR	5962-8949001XX	OM7509SC/883B	Omnirel Corporation
Voltage Regulator, Dual, +15 & -15V			

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