Specification Details: **Date: 3/30/2016**

Specification: MIL-PRF-38535
Title: Advanced Microcircuits
Federal Supply Class (FSC): 5962
Conventional: No
Specification contains quality assurance program: Yes
MIL-STD-790 Established Reliability & High Reliability: No
MIL-STD-690 Failure Rate Sampling Plans & Procedures: No
Weibull Graded: No
Specification contains space level reliability requirements: Yes
Specification allows test optimization: Yes

Contact Information:

Office of Primary Involvement: Custom Devices Branch, DLA Land and Maritime - VQC
Primary Qualifying Activity Contact: 614-692-0606, e-mail: vqc.vt@dla.mil
Secondary Qualifying Activity Contact: 614-692-0589, e-mail: vqc.at@dla.mil

Notes:

If a manufacturer desires to have test data considered for qualification, he must be certified and perform all required qualification tests; the qualification sample must be produced under a valid authorization to test with DLA Land and Maritime-VQ certified materials and manufacturing techniques; and he must comply with the requirements specified in MIL-PRF-38535 prior to the start of any testing.

The listing of microcircuit manufacturing lines in the QML applies only to products produced in the plant(s)specified herein. Therefore, only those products that have been manufactured, assembled, and tested on the certified/qualified lines herein, can be supplied as qualified microcircuit QML devices.

Microcircuits manufactured, assembled, and tested in accordance with MIL-PRF-38535 shall bear the "QML" certification mark or the "Q" abbreviation. Products manufactured, assembled, and tested shall meet all the provisions of MIL-PRF-38535; and shall be manufactured on the DLA Land and Maritime-VQ certified lines as indicated herein. The information contained in this QML reflects the actual manufacturing lines, materials, and manufacturing construction techniques of the particular test sample(s). Any product represented as being compliant shall be manufactured on the lines/flows using the material 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.

1/ This note has been removed.

2/ Package lead counts are listed by the maximum number of leads covered by the qualification. If the manufacturer's package outline drawing is covered by MIL-STD-1835, then the case outline letter will be listed.

3/ The manufacturer has certified that the advanced microcircuits listed were/are being built, tested, and shipped, using the certified/qualified lines/flows, processes, and materials, and as defined by a completed Standardized Military Drawing (SMD) or MIL-M-38510 part number are in full compliance with MIL-PRF-38535.

4/ Caution. Do not use this number for item acquisition. Items acquired to this number are NOT QML devices and may not satisfy the performance, quality, or reliability requirements of the military.

5/ All devices are in the military temperature range -55 to +125?C, unless otherwise specified in the SMD

6/ Devices found in this table meet the qualification requirement of MIL-PRF-38535 but are not covered by a Standardized Microcircuit Drawing (SMD). Please contact Mr. Tom Hess (614) 692-0547 concerning the possibility of covering these devices with an SMD.

7/ Contact Texas Instruments for plastic package availability for a given device type.

8/ This product is being actively supplied under MIL-PRF-38535 and is considered acceptable for use in new designs.

9/ SMD devices and MIL-M-38510 slash sheet devices which meet the RHA requirements of MIL-PRF-38535 shall be marked with the appropriate RHA designator M, D, P, L, R, F, G, or H replacing the dash "-" in the PIN as indicated.

Only the highest RHA level that the device is qualified for shall be listed in this QML; however, at the request of the customer, the manufacturer is authorized to supply any lower RHA level device. Upon request of the customer, the non-RHA PIN designated with a dash (-) may be supplied at the option of the manufacturer. The manufacturer may also opt to submit a certificate of compliance to have the non-RHA PIN listed in addition to the RHA PIN in this QML.

10/ The lead finish indicated in the Section I Table I listing is the most readily available from the manufacturer listed for the part. The manufacturer is authorized to supply other lead finishes than that listed provided that further testing/qualification is performed by the manufacturer on the other lead finish(es). The user needs to contact the manufacturer to determine the availability of other lead finishes not listed herein.

Important Information concerning User Decision to Procure Texas Instruments QML Devices in Plastic Packaging Technology

1. The user must carefully research the device end-use applications to determine if plastic packaging is appropriate.

2. Because plastic packages are not hermetic, if product is to be stored for a certain period in uncontrolled conditions, "dry bag" packaging may be required. TI will identify devices that require dry bag packaging. It is the buyer's responsibility to insure that these conditions are maintained over the storage life of the product.

3. Plastic packages typically do not dissipate heat as well as ceramic or metal packages.

4. The QML packaging technology flow is typically the same as commercial through assembly, therefore, users cannot require "specials".

These are some of the basic differences between TI's plastic commercial Off the Shelf (COTS) and plastic QML.

1. TRACEABILITY
COMMERCIAL OFF THE SHELF - LIMITED
QML - YES

2. BURN-IN
COMMERCIAL OFF THE SHELF - NOT UNLESS COMMERCIAL PERFORMS
QML - NOT UNLESS COMMERCIAL PERFORMS 1/

3. PRODUCT CHANGE NOTIFICATION
COMMERCIAL OFF THE SHELF - LIMITED
QML - YES

4. AVAILABILITY
COMMERCIAL OFF THE SHELF - VARIES BY DEVICES (COULD BE AS LITTLE AS 2 YEARS)
QML - EXTENDED SUPPORT WITH OPPORTUNITY FOR LIFETIME BUY

5. MILITARY TEMPERATURE TESTING
COMMERCIAL OFF THE SHELF - NO
QML - YES

6. AVAILABILITY OF QUALIFICATION AND RELIABILITY DATA
COMMERCIAL OFF THE SHELF - LIMITED
QML - YES

7. FAILURE ANALYSIS FOR FIELD FAILURES
COMMERCIAL OFF THE SHELF - LIMITED
QML - YES

8. EXTENSIVE BACKGROUND INFORMATION IN USING PRODUCT IN MILITARY ENVIRONMENTS
COMMERCIAL OFF THE SHELF - LIMITED
QML - YES

9. SUPPORT FOR SPECIAL QUALITY CLAUSES AND/OR FLOW-DOWN REQUIREMENTS
COMMERCIAL OFF THE SHELF - NO
QML - YES

For more detailed information the user may contact:

TI/QML Program Manager/(915) 561-6614
DLA Land and Maritime-VQC/Mr. Andy Thacker/(614) 692-0589
Rome Lab/Mr. James Reilly/(315) 330-4055
NASA/Mr. Nick Vermani/(301) 731-8902
DLA Land and Maritime-VAC/Mr. Tom Hess/(614) 692-0547

1/ TI's QML plastic product offering follows TI's BEST COMMERCIAL PRACTICE approach. The Military and Commercial plastic flows are essentially the same with the exception of extended Military temperature testing in accordance with the SMD. Therefore, a QML plastic device will not receive burn-in unless the commercial device also receives burn-in (regardless of test optimization results). Life test is performed during initial qualification and as part of periodic reliability monitors. In addition, some QML plastic lead frames are palladium and burn-in may degrade the solderability of the palladium lead frame.

Part Configuration:

SMD PINs shall be as follows:

Federal Stock Class Designator	RHA Designator	Drawing Designator	Device Type	Device Class	Case Outline	Lead Finish
5962	M,D,P,L,R,F, G,or H	XXXXX	ZZ	M,N,Q,V, or T	Y	Y

Device specification documents, originally published prior to 27 July 1990, shall be as follows:

Military Designator	RHA Designator	Device Specification Designator	Device Type	Device Class	Case Outline	Lead Finish
M38510	H or /	XXX	ZZ	B or S	Y	Y

Aeroflex-Colorado Springs

Quality System Information

Aeroflex-Colorado Springs
4350 Centennial Boulevard
Colorado Springs, CO 80907-3486
Website: http://www.aeroflex.com/ams/aboutus/au-cos.cfm
CAGE Code: 65342
Company Contact: Jackie Mortensen, (719) 594-8026
Qualifying Activity Contact: Scott Thomas, (614) 692-0587
QML Status: Full QML Certification/Qualification
Radiation hardness level: 1 Meg
Class: Q and V

Technology Types:

0.6um, 0.8um, 1.2um, 1.5 um and 1.2 um CMOS, and 0.18, 0.25, 0.35 um logic

Product Types:

memory, CMOS gate array, linear Bipolar

Design Center(s)

Location: Colorado Springs, CO
Line: CMOS Gate Array
Flow: 63202 Rev A

Mask Development Center(s)

Location: Colorado Springs, CO
Line: CMOS Gate Array
Flow: 63003 Rev M

Wafer Fabrication Operation(s)

Location: Colorado Springs, CO
Line: CMOS Gate Array 1.5 & 1.2
Flow: 141280/121260 1.2um; 14101/14102 1.5um
Location: Camas, WA
Line: 0.25 um
Flow: ASIC Logic
Location: TSMC, Taiwan
Line: 0.18 um,0.25um ,0.35um
Flow: Antifuse Logic
Location: Camas, WA
Line: 0.18 um
Flow: Logic
Location: Pocatello, ID
Line: 0.6um , 0.8um CMOS
Flow: 141280/121260 1.2 um; 14101/14102 1.5 um
Location: Manassas, VA
Line: 0.8 um CMOS

Assembly Operation(s)

Location: Colorado Springs, CO
Line: Flatpack, DIP, PGA & LCC packages
Flow: 30503/01 Rev A (Class Q); 30503/02 Rev A (Class V)

Electrical Test Operation(s)

Location: Colorado Springs, CO
Flow: 30503/01 Rev A (Class Q); 30503/02 Rev A (Class V)

Environmental Test Operation(s)

Location: Colorado Springs, CO
Line: CMOS Gate Array
Flow: 30503/01 Rev A (Class Q); 30503/02 Rev A (Class V)

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
DIP	28-304		solder	50-100 mil
Flatpack	28-352		solder/gold	20-50 mil
LCC	84 max		solder/gold	50 mil
PGA		8x8/18x18	solder/gold	100 mil

Amkor Technology

Quality System Information

Amkor Technology
KM 22 East Service Road
Mauntinlupa City, PH
CAGE Code: N/A
Company Contact: Louie Reyes, (632) 850 7583
Qualifying Activity Contact: Andy Thacker, (614) 692-0589
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q (A/T)

Technology Types:

Assembly/Test

Product Types:

N/A

Assembly Operation(s)

Location: Muntinlupa City, Metro Manila, Philippines
Line: PDIP
Flow: 001-0501-2300
Location: Muntinlupa City, Metro Manila, Philippines
Line: QFP
Flow: 001-0501-2306
Location: Muntinlupa City, Metro Manila, Philippines
Line: SIP
Flow: 001-0501-2310
Location: Muntinlupa City, Metro Manila, Philippines
Line: SOIC
Flow: 001-0501-2302
Location: Muntinlupa City, Metro Manila, Philippines
Line: TQFP
Flow: 001-0501-2322
Location: Muntinlupa City, Metro Manila, Philippines
Line: PLCC
Flow: 001-0501-2304
Location: Muntinlupa City, Metro Manila, Philippines
Line: SSOP
Flow: 001-0501-2319
Location: Muntinlupa City, Metro Manila, Philippines
Line: PSOP3
Flow: 001-0501-2952
Location: Muntinlupa City, Metro Manila, Philippines
Line: TSOP
Flow: 001-0501-2317
Location: Bina, Laguna, Philippines
Line: CABGA
Flow: 02-0501-1251
Location: Bina, Laguna, Philippines
Line: SBGA
Flow: 001-0501-2870
Location: Muntinlupa City, Metro Manila, Philippines
Line: Hermetic
Flow: 02-0501-1904
Location: Muntinlupa City, Metro Manila, Philippines
Line: PSOP2
Flow: 001-0501-2950
Location: Muntinlupa City, Metro Manila, Philippines
Line: TSSOP
Flow: 001-0501-2317
Location: Muntinlupa City, Metro Manila, Philippines
Line: SSOP
Flow: 001-0501-2319

Amkor Technology

Quality System Information

Amkor Technology
KM 22 East Service Road
Mauntinlupa City, PH
CAGE Code: N/A
Company Contact: Louie Reyes, (632) 850 7583
Qualifying Activity Contact: Andy Thacker, (614) 692-0589
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q (A/T)

Technology Types:

Assembly/Test

Product Types:

N/A

Assembly Operation(s)

Location: Bina, Laguna, Philippines
Line: SBGA
Flow: 001-0501-2870
Location: Bina, Laguna, Philippines
Line: Flex Array
Flow: 02-0501-1632
Location: Muntinlupa City, Metro Manila, Philippines
Line: TSOP
Flow: 001-0501-2317
Location: Muntinlupa City, Metro Manila, Philippines
Line: PSOP3
Flow: 001-0501-2952
Location: Bina, Laguna, Philippines
Line: Flex Array
Flow: 02-0501-1632
Location: Bina, Laguna, Philippines
Line: PBGA
Flow: 02-0501-0993
Location: Muntinlupa City, Metro Manila, Philippines
Line: PSOP2
Flow: 001-0501-2950
Location: Muntinlupa City, Metro Manila, Philippines
Line: PDIP
Flow: 001-0501-2300
Location: Muntinlupa City, Metro Manila, Philippines
Line: QFP
Flow: 001-0501-2306
Location: Muntinlupa City, Metro Manila, Philippines
Line: SIP
Flow: 001-0501-2310
Location: Muntinlupa City, Metro Manila, Philippines
Line: SOIC
Flow: 001-0501-2302
Location: Muntinlupa City, Metro Manila, Philippines
Line: TQFP
Flow: 001-0501-2322
Location: Muntinlupa City, Metro Manila, Philippines
Line: PLCC
Flow: 001-0501-2304
Location: Bina, Laguna, Philippines
Line: CABGA
Flow: 02-0501-1251
Location: Muntinlupa City, Metro Manila, Philippines
Line: TSSOP
Flow: 001-0501-2317

Amkor Technology

Quality System Information

Amkor Technology
KM 22 East Service Road
Mauntinlupa City, PH
CAGE Code: N/A
Company Contact: Louie Reyes, (632) 850 7583
Qualifying Activity Contact: Andy Thacker, (614) 692-0589
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q (A/T)

Technology Types:

Assembly/Test

Product Types:

N/A

Assembly Operation(s)

Location: Muntinlupa City, Metro Manila, Philippines
Line: Hermetic
Flow: 02-0501-1904
Location: Bina, Laguna, Philippines
Line: PBGA
Flow: 02-0501-0993

Environmental Test Operation(s)

Location: Bina, Laguna, Philippines
Line: Test
Flow: 02-0529-1255
Location: Bina, Laguna, Philippines
Line: Test
Flow: 02-0529-1255

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
CerDip (glass seal)	8-48		solder	
Flexarray				
LCPGA				
PBGA				
PGA		28-655		
PLCC				
PSOP				
Plastic-DIP	8-64			
Plastic-PGA				
Quad Flat Pack	44-208			
SBGA				
SIP				
SOIC	8-16,16-30			
SOJ				
SSOP	8-28,16-28			
Side-Braze	8-68		N/A	variable
TQFP				

Analog Devices

Quality System Information

Analog Devices
7910 Triad Center Dr
Greensboro, NC 27409
Website: http://www.analog.com/salesdir/continent.asp
CAGE Code: 24355, Symbol Code: CEKS
Company Contact: Elaine Trotter, (336) 605-4234
Qualifying Activity Contact: Scott Thomas, (614) 692-0587
QML Status: Full QML Certification/Qualification
Radiation hardness level: 100 K
Class: Q and V

Technology Types:

Bipolar, CMOS, Bi-CMOS, Bi-FET

Product Types:

data converters, op amps, analog and digital signal processors, sensors, references, switches, multiplexers

Design Center(s)

Location: Nashua (DSP Tools), NH
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver 1.0
Location: Longmont, CO
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver 1.0
Location: Raleigh, NC
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver 1.0
Location: Aalborg, Denmark
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver 1.0
Location: Cambridge, Great Britain
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver 1.0
Location: Somerset, NJ
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver 1.0
Location: San Diego, CA
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver 1.0
Location: Austin, TX
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver 1.0
Location: Toronto, Canada
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver 1.0
Location: Sandy, UT
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver 1.0
Location: Valencia, Spain
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver 1.0
Location: Santa Clara, CA
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver 1.0
Location: Wilmington, MA
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver. 1.0
Location: Beaverton, OR
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver. 1.0

Analog Devices

Quality System Information

Analog Devices
7910 Triad Center Dr
Greensboro, NC 27409
Website: http://www.analog.com/salesdir/continent.asp
CAGE Code: 24355, Symbol Code: CEKS
Company Contact: Elaine Trotter, (336) 605-4234
Qualifying Activity Contact: Scott Thomas, (614) 692-0587
QML Status: Full QML Certification/Qualification
Radiation hardness level: 100 K
Class: Q and V

Technology Types:

Bipolar, CMOS, Bi-CMOS, Bi-FET

Product Types:

data converters, op amps, analog and digital signal processors, sensors, references, switches, multiplexers

Design Center(s)

Location: Limerick, Ireland
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver 1.0
Location: Greensboro, NC
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver. 1.0
Location: Wilmington, MA
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver. 1.0
Location: Newbury, United Kingdom
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver. 1.0
Location: San Jose, CA
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver 1.0
Location: Vancouver, WA
Line: Linear, Mixed Signal, & Digital (Q and V)
Flow: Design Manual Ver 1.0

Wafer Fabrication Operation(s)

Location: Wilmington, MA
Line: Bipolar, BiFET, BiCMOS (Q and V)
Flow: ADI-0088
Location: TSMC; Hsin-chu, Taiwan
Line: CMOS, Bi-MOS (Q)
Flow: ADI-0088
Location: OKI Tokoyo, Japan
Line: Bipolar (Q)
Flow: ADI-0088
Location: Limerick, Ireland
Line: CMOS, BIMOS (Q and V)
Flow: ADI-0088
Location: Chartered Semiconductor, Singapore
Line: Fabs 1,2 and 3, CMOS (Q)
Flow: ADI-0088
Location: Santa Clara, CA
Line: Bipolar, BiFET, BiCMOS (Q and V)
Flow: ADI-0088

Assembly Operation(s)

Location: ADI, Greensboro, NC
Line: Ceramic Packages
Flow: ADI-0300
Location: ADI, Gen. Trias, Cavite, Philippines
Line: Ceramic, metal can
Flow: F-0133M,F0153M & F0154M

Analog Devices

Quality System Information

Analog Devices
7910 Triad Center Dr
Greensboro, NC 27409
Website: http://www.analog.com/salesdir/continent.asp
CAGE Code: 24355, Symbol Code: CEKS
Company Contact: Elaine Trotter, (336) 605-4234
Qualifying Activity Contact: Scott Thomas, (614) 692-0587
QML Status: Full QML Certification/Qualification
Radiation hardness level: 100 K
Class: Q and V

Technology Types:

Bipolar, CMOS, Bi-CMOS, Bi-FET

Product Types:

data converters, op amps, analog and digital signal processors, sensors, references, switches, multiplexers

Assembly Operation(s)

Location: ADI, Manila, Philippines
Line: Ceramic Package, metal can package
Flow: F-0133M, F-0153M, F-0154M

Electrical Test Operation(s)

Location: Wilmington, MA
Line: Electrical Screening, Group A
Flow: Per PROMIS system corresponding to part number
Location: Greensboro, NC
Line: Electrical Test
Flow: Per PROMIS system corresponding to part number
Location: ADI, Manila, Philippines
Line: Electrical Test
Flow: Per PROMIS system corresponding to part number
Location: ADI, Gen. Trias, Cavite, Philippines
Line: Electrical Screening, Group A
Flow: Per PROMIS system corresponding to part number

Environmental Test Operation(s)

Location: Wilmington, MA
Line: Screening, Burn-In, Group B/C/D
Flow: Per PROMIS system corresponding to part number
Location: Limerick, Ireland
Line: Environmental Test
Flow: LK-00399
Location: ADI, Manila, Philippines
Line: Screening, Burn-In, Group B/C
Flow: ADI-0300
Location: ADI, Gen. Trias, Cavite, Philippines
Line: Screening, Burn-In, Group B/C
Flow: Per PROMIS system corresponding to part number

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
Can	2-12		solder/gold	100-400 mil
DIP	8-48		solder/gold	100-600 mil
Flatpack	2-52		solder/gold	50 mil
J-Lead Chip Carrier	44		gold	
LCC	20-48		solder/gold	50 mil

Atmel-Nantes

Quality System Information

Atmel-Nantes
La Chantrerie BP 70602
44306 Nantes Cedex 3, FR
Website: http://www.atmel.com/dyn/general/contact.asp
CAGE Code: F7400
Company Contact: Valerie Lepaludier, 33240181633
Qualifying Activity Contact: Andy Thacker, (614) 692-0589
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q and V

Technology Types:

CMOS 0.8um-0.6um-0.5um-0.35um and RT variants

Product Types:

ASICS, Memories, FIFO,SRAM,Gate Arrays,Microprocessors, Microcontrollers, DSP

Design Center(s)

Location: Garching, Germany
Line: Atmel Design Center
Flow: contact manufacturer
Location: Nantes, France
Line: Atmel Design Center
Flow: contact manufacturer
Location: Bracknell, UK
Line: Atmel Design Center
Flow: contact manufacturer
Location: Milan, Italy
Line: Atmel Design Center
Flow: contact manufacturer

Mask Development Center(s)

Location: Taoyuan, Taiwan
Line: TOPPAN CHUNGWA ELECTRONICS CO., LTD. (T.C.E.)
Flow: N/A

Wafer Fabrication Operation(s)

Location: L Foundry (formerly Atmel), Rousset Cedex, France
Line: CMOS 0.35um, 0.25um, 0.18um and RT Variouts
Flow: contact manufacturer
Location: MHS Nantes, FR --- (Formerly Atmel-Nantes) France
Line: CMOS 0.8,0.6,0.5 RT and RTP Variout
Flow: contact manufacturer
Location: UMC, HsinChu, Taiwan
Line: 8S for CMOS 0.18¿m and RT Variouts
Flow: 8S for CMOS 0.18¿m and RT Variouts
Location: UMC, Tainan, Taiwan
Line: 12A for CMOS 0.09¿m and RT Variouts

Assembly Operation(s)

Location: e2v, Grenoble, France
Line: Hermetic Assembly, PGA, Sidebraze, Flat Pack, MCGA
Flow: contact manufacturer
Location: Millennium Microtech Co, Ltd, Chachoengsao, Thailand
Line: MMT
Flow: MMTAH027 & 035 (QMLV and QMLQ DLA qualified)

Electrical Test Operation(s)

Location: Nantes, France
Line: Atmel Nantes
Flow: contact manufacturer

Environmental Test Operation(s)

Location: Nantes, France
Line: Atmel S.A.
Flow: contact manufacturer

Atmel-Nantes

Quality System Information

Atmel-Nantes
La Chantrerie BP 70602
44306 Nantes Cedex 3, FR
Website: http://www.atmel.com/dyn/general/contact.asp
CAGE Code: F7400
Company Contact: Valerie Lepaludier, 33240181633
Qualifying Activity Contact: Andy Thacker, (614) 692-0589
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q and V

Technology Types:

CMOS 0.8um-0.6um-0.5um-0.35um and RT variants

Product Types:

ASICS, Memories, FIFO,SRAM,Gate Arrays,Microprocessors, Microcontrollers, DSP

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
DIP	14-48		solder/gold	100 mil
Flatpack	28-352		solder/gold	25-50 mil
LCC	24		gold	
LGA	349-625		gold	
MCGA	349-472		solder	50 mil
PGA		64-232	gold	100 mil

BAE Systems

Quality System Information

BAE Systems
9300 Wellington Road
Manassas, VA 22110-4122
Website: http://www.baesystems.com
CAGE Code: 1RU44
Company Contact: Paul Nixon, (571) 364-7657
Qualifying Activity Contact: Paul Granchi, (614) 692-9975
QML Status: Full QML Certification/Qualification
Radiation hardness level: 2 Meg
Class: Q and V

Technology Types:

0.8um RHCMOS (RHCMOSMOS3E, RHCMOS4E, RHCMOS4S0); 0.8um RHCMOS-E with ONO Anti-fuse (RHCMOS4EF); 0.5um RHCMOS (RHCMOS5M, RHCMOS5ML); 0.25um RHCMOS (RH25); 0.25um RHCMOS (R25) Class Q only

Product Types:

Memory (SRAM, PROM), FPGA, microprocessor, logic, custom, semi-custom and gate array ASICs

Design Center(s)

Location: Manassas, VA
Line: VLSI Design and Product Development
Flow: per QM plan and technology specific design rules

Mask Development Center(s)

Location: Outside location
Line: Toppan (Dupont), Photronics, IBM, Towne Labs
Flow: Contact Supplier

Wafer Fabrication Operation(s)

Location: Manassas, VA
Line: Semiconductor Technology Center
Flow: QM Plan Baseline Process Flows RH25
Location: Burlington, VT
Line: IBM Microelectronics
Flow: R25 (IBM 0.25um CMOS6SF)
Location: Manassas, VA
Line: Semiconductor Technology Center
Flow: QM Plan Baseline Process Flows 0.8um - RHCMOS3E, RHCMOS4E, RHCMOS4S
Location: Manassas, VA
Line: Semiconductor Technology Center
Flow: QM Plan Baseline Process Flows 0.5um - RHCMOS5M, RHCMOS5ML
Location: East Fishkill, NY
Line: IBM Microelectronics
Flow: RH45 (IBM 45nm SOI12S0)
Location: Manassas, VA
Line: Semiconductor Technology Center
Flow: QM Plan Baseline Process Flows 0.8um with ONO anti-fuse- RHCMOS4EF

Assembly Operation(s)

Location: Manassas, VA
Line: BAE Systems assembly - Memory, Logic, Microprocessors, Multi-Chip modules
Flow: QM Plan Baseline Process Flows, Wirebond, Flipchip, Ceramic FP or Column Grid Array

Electrical Test Operation(s)

Location: Manassas, VA
Line: BAE Systems Memory and Logic Test
Flow: QM Plan Baseline Process Flows

Environmental Test Operation(s)

Location: Manassas, VA
Line: BAE Systems Burn-in and Mil-screen
Flow: QM Plan Baseline Process Flows
Location: USA
Line: subset of TCI Group B and D testing done by DLA-suitable Labs (e2v, Pernicka, Silicon Cert, Oneida, Silicon Turnkey Solutions, Integra Technologies)
Flow: Contact Supplier

BAE Systems

Quality System Information

BAE Systems
9300 Wellington Road
Manassas, VA 22110-4122
Website: http://www.baesystems.com
CAGE Code: 1RU44
Company Contact: Paul Nixon, (571) 364-7657
Qualifying Activity Contact: Paul Granchi, (614) 692-9975
QML Status: Full QML Certification/Qualification
Radiation hardness level: 2 Meg
Class: Q and V

Technology Types:

0.8um RHCMOS (RHCMOSMOS3E, RHCMOS4E, RHCMOS4S0); 0.8um RHCMOS-E with ONO Anti-fuse (RHCMOS4EF); 0.5um RHCMOS (RHCMOS5M, RHCMOS5ML); 0.25um RHCMOS (RH25); 0.25um RHCMOS (R25) Class Q only

Product Types:

Memory (SRAM, PROM), FPGA, microprocessor, logic, custom, semi-custom and gate array ASICs

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
CGA	19x19, 25x25		Solder columns	
DIP	28		gold	100 mil
Flatpack	28-340		gold	15-50 mil
LCC	32		gold	50 mil

Corwil Technology Corporation

Quality System Information

Corwil Technology Corporation
1635 McCarthy Boulevard
Milpitas, CA 95035
Website: http://www.corwil.com
CAGE Code: 061F4
Company Contact: Nawal Cotran, (408) 321-6556
Qualifying Activity Contact: Sean McNulty, (614) 692-8800
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: QV (A/T)

Technology Types:

Assembly/Test

Product Types:

N/A

Assembly Operation(s)

Location: Milpitas, CA
Line: Military Hermetic
Flow: Customer Specific

Environmental Test Operation(s)

Location: Milpitas, CA
Line: Military 883
Flow: Customer Specific

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
CerDip (glass seal)	8-64		solder	
CerPack (glass seal)	14-28		solder	
Flatpack	6-172		gold	25mil
LCC	6-132		gold	50 mil
PGA		28-391	gold	25mil
Quad Flat Pack	20-304		solder	
SOIC	8-28		gold	
Side-Braze	8-64		gold	
TO	TO-18		solder	

Criteria Labs

Quality System Information

Criteria Labs
706 Brentwood Street
Austin, TX 78744
Website: http://criterialabs.com
CAGE Code: 1NQ10
Company Contact: Yolanda Guillory, (512) 637-4516
Qualifying Activity Contact: Paul Granchi, (614) 692-9975
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q (A/T)

Technology Types:

Assembly/Test

Product Types:

N/A

Assembly Operation(s)

Location: Austin, TX
Line: Military Hermetic
Flow: Customer Specific

Environmental Test Operation(s)

Location: Austin, TX
Line: Military 883
Flow: Customer Specific

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
Flatpack	CM		solder/gold	
LCC	CM		solder/gold	
Side-Braze	CM		solder/gold	

Cypress Semiconductor

Quality System Information

Cypress Semiconductor
198 Champion Court
San Jose, CA 95134-1709
Website: http://www.cypress.com
CAGE Code: 65786, Symbol Code: CETK
Company Contact: Don Darling, (408) 544-1635
Qualifying Activity Contact: Michael Grammens, (614) 692-0604
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q, M

Technology Types:

0.8, 0.65 um DLM and TLM, CMOS and BICMOS

Product Types:

nvSRAM, PLD, clocks

Design Center(s)

Location: San Jose, CA
Line: N/A
Flow: Cypress design rules

Wafer Fabrication Operation(s)

Location: Taiwan Semiconductor Mfg, Taiwan
Line: PLD, 0.5 u
Flow: QM Plan 90-00033
Location: Chartered (Global Foundry), Singapore
Line: Fab2; 0.8 u, nvSRAM
Flow: 90-00033 Military Programs
Location: Round Rock, TX
Line: Fab2; 0.8u, CMOS & BICMOS
Flow: 90-00033 Military Programs

Assembly Operation(s)

Location: MMT, Chachoengsao, Thailand
Line: Hermetic
Flow: 49-15xxx per package type
Location: Amkor Anam, Manila, Philippines
Line: CLCC, CERDIP
Flow: 49-1xxxx per package type

Electrical Test Operation(s)

Location: CML, Cavite City, Philippines
Line: PROM, PLD, clocks
Flow: 16-0001 program change procedure
Location: Integra, Wichita, KS
Line: nvSRAM
Flow: 16-0001 program change procedure

Environmental Test Operation(s)

Location: SemPac, Philippines
Line: Burn-in & Life Test
Flow: 29-nnnnn per device type
Location: QP Semiconductor, Santa Clara, CA
Line: Reliability, mechanical
Flow: 22-00011, Quality Conformance and Qualification Procedure
Location: Atlantic Analytical Laboratories, Whitehouse, NJ
Line: Internal Water Vapor
Flow: 22-00011, Quality Conformance and Qualification Procedure
Location: CML, Cavite City, Philippines
Line: Reliability & QCI Lab, Burn-in & Life Test
Flow: 22-00012, Group C and D Travelers
Location: MMT, Chachoengsao, Thailand
Line: Reliability, mechanical and thermal stress
Flow: 22-00011, Quality Conformance and Qualification Procedure

Cypress Semiconductor

Quality System Information

Cypress Semiconductor
198 Champion Court
San Jose, CA 95134-1709
Website: http://www.cypress.com
CAGE Code: 65786, Symbol Code: CETK
Company Contact: Don Darling, (408) 544-1635
Qualifying Activity Contact: Michael Grammens, (614) 692-0604
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q, M

Technology Types:

0.8, 0.65 um DLM and TLM, CMOS and BICMOS

Product Types:

nvSRAM, PLD, clocks

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
DIP	24-28		solder	100 mil
Flatpack	160-208		Gold	50 mil
LCC	32-84		solder	50 mil

DPA Components International (DPACI)

Quality System Information

DPA Components International (DPACI)
2251 Ward Avenue
Simi Valley, CA 93065
CAGE Code: 6S055
Company Contact: Douglas Schweitzer, (805) 581-9200
Qualifying Activity Contact: Jonathan Puhalsky, (614) 692-2458
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q&QV(A/T)

Technology Types:

90 nm CMOS & Assembly/Test

Product Types:

Asyncronus SRAM, Class Q&V assembly/test

Design Center(s)

Location: San Jose, CA
Line: Cypress
Flow: Cypress Design Rules
Location: Original Manufacturer
Line: Various
Flow: Various

Mask Development Center(s)

Location: Original Manufacturer
Line: Various
Flow: Various

Wafer Fabrication Operation(s)

Location: Original IC Manufacturer
Line: Various
Flow: Various
Location: Bloomington, MN
Line: Cypress
Flow: R9 (90 Nanometer CMOS)
Location: Bloomington, MN
Line: Cypress
Flow: R9 (90 Nanometer CMOS)

Assembly Operation(s)

Location: Simi Valley, CA
Line: DPA Class V contract assemlby
Flow: Standard DPA Components QML Flow DPA-OID-009
Location: Simi Valley, CA
Line: DPA Class Q SRAM
Flow: Standard DPA Components QML Flow DPA-OID-009
Location: Milipitas, CA
Line: Golden Altos, Alternate Assembly
Flow: Standard Golden Altos QML Line, GAF 1491, 1492
Location: Milipitas, CA
Line: Alternate Tinning
Flow: QML Tinning procedure

Environmental Test Operation(s)

Location: Milipitas, CA
Line: Alternate Solderability
Flow: DSCC Approved Solerability Flow
Location: Simi Valley, CA
Line: DPA Environmental test
Flow: Standard DPA 883 Envoronmental Test Procedure

DPA Components International (DPACI)

Quality System Information

DPA Components International (DPACI)
2251 Ward Avenue
Simi Valley, CA 93065
CAGE Code: 6S055
Company Contact: Douglas Schweitzer, (805) 581-9200
Qualifying Activity Contact: Jonathan Puhalsky, (614) 692-2458
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q&QV(A/T)

Technology Types:

90 nm CMOS & Assembly/Test

Product Types:

Asyncronus SRAM, Class Q&V assembly/test

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
Can	2-10		solder/gold	
Chip Carrier J lead	4-370		solder/gold	
DIP	8-48		solder/gold	
Flatpack	6-256		solder/gold	
PGA		4-504	solder/gold	
SOIC	8-20		solder	
SOJ	20-26		solder	
SSOP	20-28		solder	
Side-Braze	8-64		solder	
TSOPII	44-54		solder/gold	

e2v aerospace and defense, inc. (DBA QP Semiconductor)

Quality System Information

e2v aerospace and defense, inc. (DBA QP Semiconductor)
765 Sycamore Drive
Milpitas, CA 95035
Website: http://www.qpsemi.com/default.asp
CAGE Code: 0C7V7
Company Contact: Margaret Dancey, (408) 585-7172
Qualifying Activity Contact: Vinh Tran, (614) 692-0606
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q and V

Technology Types:

Bipolar, Linear, MCO, Digital, FAST, ECL, CMOS, BiCMOS, HCMOS

Product Types:

Bipolar Memory, Linear, Microcontroller, SRAM, PROM, EPROM, PLD and Logic

Design Center(s)

Location: e2v a&d (DBA QP Semiconductor) - Milpitas, CA
Line: N/A
Flow: Per SCD-14 Device Design Requirements
Location: Seattle, WA
Line: N/A
Flow: Per SCD-14 Device Design Requirements
Location: Hong Kong
Line: N/A
Flow: Per SCD-14 Device Design Requirements
Location: Tempe, AZ
Line: N/A
Flow: Per SCD-14 Device Design Requirements
Location: San Jose, CA
Line: N/A
Flow: Per SCD-14 Device Design Requirements
Location: Canada
Line: N/A
Flow: Per SCD-14 Device Design Requirements
Location: Swindon, UK
Line: N/A
Flow: Per SCD-14 Device Design Requirements
Location: Taiwan
Line: N/A
Flow: Per SCD-14 Device Design Requirements
Location: Los Angeles, CA
Line: N/A
Flow: Per SCD-14 Device Design Requirements

Wafer Fabrication Operation(s)

Location: Lubbock, TX
Line: QP2 Xfab, CMOS
Flow: 0.8u, 3 metal
Location: UK
Line: QP12 Plessey, Bipolar logic
Flow: 1u, 3 metal
Location: California
Line: QP11 Micrel, OP AMPs/Switches bipolar
Flow: 1u, 2 metal
Location: California
Line: QP7 BICMOS, Bipolar logic, Bipolar analog
Flow: 1u, 2 metal
Location: Taiwan
Line: QP5 Macronix, CMOS Non-Volatile
Flow: 0.45u, 2 metal

Assembly Operation(s)

e2v aerospace and defense, inc. (DBA QP Semiconductor)

Quality System Information

e2v aerospace and defense, inc. (DBA QP Semiconductor)
765 Sycamore Drive
Milpitas, CA 95035
Website: http://www.qpsemi.com/default.asp
CAGE Code: 0C7V7
Company Contact: Margaret Dancey, (408) 585-7172
Qualifying Activity Contact: Vinh Tran, (614) 692-0606
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q and V

Technology Types:

Bipolar, Linear, MCO, Digital, FAST, ECL, CMOS, BiCMOS, HCMOS

Product Types:

Bipolar Memory, Linear, Microcontroller, SRAM, PROM, EPROM, PLD and Logic

Assembly Operation(s)

Location: Millennium Microtech (Thailand) Co., Ltd.- (MMT), Chachoengsao, Thailand
Line: Military Hermetic, QML Q, S/V Certified
Flow: QPL-AH-001, QP Labs Process Flow and Special Requirements
Location: e2v a&d (DBA QP Semiconductor) - Milpitas, CA
Line: Military Hermetic, QML Q, S/V Certified
Flow: Per QAP-21, Military Screening, Qualification and QCI Testing
Location: Golden Altos, Milpitas, CA
Line: Military Hermetic
Flow: Per SCD-12 Assembly Build Requirements

Electrical Test Operation(s)

Location: Integra, Witchita, Kansas
Line: Electrical Test
Flow: Per SOP-01-0004, Burn-in and Test Program Development (DRO/BRO)
Location: Millennium Microtech (Thailand) Co., Ltd.- (MMT), Chachoengsao, Thailand
Line: Electrical Test
Flow: Per SOP-01-0004, Burn-in and Test Program Development (DRO/BRO)
Location: e2v a&d (DBA QP Semiconductor) - Milpitas, CA
Line: Electrical Test
Flow: Per SOP-01-0004, Burn-in and Test Program Development (DRO/BRO)

Environmental Test Operation(s)

Location: Millennium Microtech (Thailand) Co., Ltd.- (MMT), Chachoengsao, Thailand
Line: Military Screening
Flow: DSCC QML Approved - Class Q and S/V
Location: e2v a&d (DBA QP Semiconductor) - Milpitas, CA
Line: Military Screening and QCI. (See DSCC Lab Suitability Certification VQC-05-007332)
Flow: Per QAP-21, Military Screening, Qualification and QCI Testing

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
DIP	8-64		solder/gold	100 mil
Flatpack / QFP	10-132		solder/gold	25/50 mil
J-Lead Chip Carrier	28-84			
LCC	14-84		solder/gold	40/50 mil
Metal Can/ TO-5	8-10 L		solder/gold	N/A
Metal Can/ TO-66	9 L		solder	N/A
Metal Can/ TO-8	12 L		solder/gold	N/A
PGA		11x11, 15x15	solder/gold	100 mil

e2v Technologies

Quality System Information

e2v Technologies
Avenue de Rochepleine BP-123,
38521 Saint-Egreve Cedex, FR
Website: http://www.e2v.com/
CAGE Code: F8385
Company Contact: Christian Carmona, 33476583189
Qualifying Activity Contact: Scott Thomas, (614) 692-0587
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q

Technology Types:

HCMOS 0.5um,0.65um,1.0 um, 1.5 um, 3.0 um, CMOS 0.6 um

Product Types:

Microprocessors, Microcontrollers, Memory

Design Center(s)

Location: France
Line: N/A
Flow: M54HCMOS
Location: France
Line: N/A
Flow: 54ACMOS

Wafer Fabrication Operation(s)

Location: Austin, TX
Line: MOS11
Flow: 0.65 um
Location: Italy
Line: F8
Flow: CMOSE5-U35
Location: Austin, TX
Line: MOS13
Flow: HiP1.3 (.5um)
Location: France
Line: HCMOS
Flow: 3.0 um
Location: Scotland
Line: MOS1
Flow: 1.5 um
Location: Austin, TX
Line: MOS8
Flow: 1.0 um
Location: Sendai, Japan
Line: TCS
Flow: 1 um

Assembly Operation(s)

Location: France
Line: F5
Flow: CDSG-QFPBTND

Electrical Test Operation(s)

Location: France
Line: F3
Flow: ASSG-QFPBDMA
Location: France
Line: Sentry20-AEHR
Flow: 2A00QT, 2A00Q
Location: France
Line: J971-B1300
Flow: 2A00Q

e2v Technologies

Quality System Information

e2v Technologies
Avenue de Rochepleine BP-123,
38521 Saint-Egreve Cedex, FR
Website: http://www.e2v.com/
CAGE Code: F8385
Company Contact: Christian Carmona, 33476583189
Qualifying Activity Contact: Scott Thomas, (614) 692-0587
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q

Technology Types:

HCMOS 0.5um,0.65um,1.0 um, 1.5 um, 3.0 um, CMOS 0.6 um

Product Types:

Microprocessors, Microcontrollers, Memory

Electrical Test Operation(s)

Location: France
Line: GR18-B160
Flow: 2A00Q
Location: France
Line: J971-AEHR
Flow: 2A00QT, 2A00QL
Location: France
Line: J971-AEHR
Flow: 1AR3BIN
Location: France
Line: GR180-B1300
Flow: 0AR3QT0A, 0ARAR3QT
Location: France
Line: GR180-AEHR
Flow: TC23EFM, TC13FM, TC23FVB

Environmental Test Operation(s)

Location: France
Line: Periodically Qualification
Flow: 'FIA' Software

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
DIP	40-48		gold/tin	100 mil
Flatpack	52-240		gold/tin	20-50 mil
LCC	44-240		gold/tin	20-50 mil
PGA		68-241	gold/tin	100 mil

Golden Altos Corporation

Quality System Information

Golden Altos Corporation
402 South Hillview Drive
Milpitas, CA 95035
Website: http://www.goldenaltos.com/
CAGE Code: 065N4
Company Contact: Timothy Flaherty, (408) 956-1010
Qualifying Activity Contact: Sean McNulty, (614) 692-8800
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: QV (A/T)

Technology Types:

Assembly/Test

Product Types:

N/A

Assembly Operation(s)

Location: Milpitas, CA
Line: Hermetic
Flow: GAF 1492

Environmental Test Operation(s)

Location: Milpitas, CA
Line: 883 Testing

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
Cerdip	8-48		solder	100 mil
Cerpac	8-48		solder	50 mil
Cerquad	20-304		solder/gold	15, 19-50 mil
Flat Packages	8-172		solder/gold	19-50 mil
JLCC	28-84		solder/gold	50-100 mil
LCC	3-84		solder/gold	25 35 40 50 mil
PGA		28-476	solder/gold	50, 100 mil
SOIC	8-30		solder/gold	25, 50, 100 mil
Sidebraze	8-64		solder/gold	70, 100 mil
TO CAN/Header	2-16		solder/gold	50-400 mil

Honeywell Aerospace

Quality System Information

Honeywell Aerospace
12001 State Highway 55
Plymouth, MN 55441-4799
Website: http://www.honeywellmicroelectronics.com/
CAGE Code: 34168
Company Contact: Trish Hertog, (763) 954-2594
Qualifying Activity Contact: Shing Yu, (614) 692-0588
QML Status: Full QML Certification/Qualification
Radiation hardness level: 1 Meg
Class: Q and V

Technology Types:

0.8um SOI IV, 0.7um SOI IVE, 0.35um SOI V, 0.15um S150

Product Types:

Core Product Types (CPT):[SRAM, FIFO, ROM, Gate Array ASICs, Full Custom]; SOI IV, V, and S150: CPT, SOI IVE, V, and S150: Memory

Design Center(s)

Location: Plymouth, MN
Line: SOI IV(Q & V), SOI IVE(Q & V), SOI V (Q & V), S150 (V), MRAM
Flow: GMS 10022

Mask Development Center(s)

Location: Plymouth, MN
Line: SOI IV (Q & V), SOI IVE(Q & V), SOI V (Q & V), S150 (V), MRAM
Flow: GMS 10027

Wafer Fabrication Operation(s)

Location: Plymouth, MN
Line: SOI IV (Q & V), SOI IVE(Q & V), SOI V (Q & V), S150 (V), MRAM
Flow: 22017935 (SOI IV), 22019135 (SOI IVe), 22020920 (SOI V), 22025794 (S150)
Location: Chandler, AZ
Line: MRAM
Flow: 22031906-SD, 58035282-SD

Assembly Operation(s)

Location: Micross Components, Orlando, FL
Line: Military Hermetic QML Q/V Certified
Flow: S HW SCA
Location: Plymouth, MN
Line: SOI IV (Q & V), SOI IVE(Q & V), SOI V (Q & V), S150 (V), MRAM
Flow: 22009590(SCP), 22021691(MCMs)

Electrical Test Operation(s)

Location: Plymouth, MN
Line: SOI IV (Q & V), SOI IVE(Q & V), SOI V (Q & V), S150 (V), MRAM
Flow: GMS 10006

Environmental Test Operation(s)

Location: Micross Components, Orlando, FL
Line: 883 Testing
Flow: GMS 10006
Location: Plymouth, MN
Line: SOI IV (Q & V), SOI IVE(Q & V), SOI V (Q & V), S150 (V), MRAM
Flow: GMS 10006

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
DBGA/LGA	783 Max		solder balls/Au	40-50 mil
DIP	24-28		gold	100 mil
Flatpack	28-352		gold	20-50 mil
Pin Grid Array	128 Max		gold	100 mil

Integrated Device Technology, Inc (IDT)

Quality System Information

Integrated Device Technology, Inc (IDT)
6024 Silver Creek Valley Road
San Jose, CA 95138
Website: http://www.idt.com/
CAGE Code: 0SP21
Company Contact: Mary Vesey, (408) 284-4565
Qualifying Activity Contact: Jonathan Puhalsky, (614) 692-2458
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q

Technology Types:

BiCMOS, .08um CMOS 7, 0.6 um CMOS 8, CMOS 9

Product Types:

SRAM, Logic

Design Center(s)

Location: IDT, San Jose, CA
Line: N/A
Flow: IDT Design Rules

Mask Development Center(s)

Location: IDT, San Jose, CA
Line: N/A
Flow: IDT Design Rules

Wafer Fabrication Operation(s)

Location: TSMC Fab 3, Hsinchu, Taiwan
Line: Fab 3
Flow: TSMC 0.5u (1-2P/2-3M), TSMC 0.35u (1-2P/3-4M)
Location: IDT, Salinas, CA
Line: Fab 2 (Die/Wafer Stock Only)
Flow: 0.6um CMOS 8, 0.8um CMOS 7
Location: IDT, Hillsboro, OR
Line: Fab 4
Flow: CMOS 7, CMOS 8, CMOS 9

Assembly Operation(s)

Location: Amkor, Muntinlupa City, Philippines
Line: Hermetic Assembly
Flow: IDT Hermetic Flow
Location: MMT, Tambon Saladang Bangnumpriew, Thailand
Line: Hermetic Assembly
Flow: Form 4H-LS-0309

Electrical Test Operation(s)

Location: IDT, Penang,
Line: N/A
Flow: IDT Military Test Flow QCA-1797, QCA-0600

Environmental Test Operation(s)

Location: MMT, Tambon Saladang Bangnumpriew, Thailand
Line: QCI Monitor
Flow: Form TSP-4019
Location: KESP, Penang, Malaysia
Line: Burn-In Monitor
Flow: TSS-5512-C, TSC-6121
Location: IDT, Penang,
Line: N/A
Flow: QCA-0600

Integrated Device Technology, Inc (IDT)

Quality System Information

Integrated Device Technology, Inc (IDT)
6024 Silver Creek Valley Road
San Jose, CA 95138
Website: http://www.idt.com/
CAGE Code: 0SP21
Company Contact: Mary Vesey, (408) 284-4565
Qualifying Activity Contact: Jonathan Puhalsky, (614) 692-2458
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q

Technology Types:

BiCMOS, .08um CMOS 7, 0.6 um CMOS 8, CMOS 9

Product Types:

SRAM, Logic

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
DIP	16-48		solder	100 mil
Flatpack	16-84		solder	50 mil
LCC	20-68		solder	50 mil
PGA		68-84	solder	100 mil

Intersil Corporation

Quality System Information

Intersil Corporation
1650 Robert J. Colan Blvd.
Palm Bay, FL 32905-3398
Website: http://www.intersil.com/cda/Support/contacts/
CAGE Code: 34371, Symbol Code: CDWO
Company Contact: Jeff Touvell, (321) 729-5602
Qualifying Activity Contact: Paul Granchi, (614) 692-9975
QML Status: Full QML Certification/Qualification
Radiation hardness level: 300 K
Class: Q,V,T,M

Technology Types:

Bipolar, CMOS, linear, CMOS SAJI

Product Types:

memories, logic, switches, timers, microprocessors, micro-peripherals

Wafer Fabrication Operation(s)

Location: Intersil,Palm Bay, FL
Line: Fab 59
Flow: Bipolar, CMOS, SAJI, SAJI I, Scaled SAJI IV, SAJI V, SAJI VI, L7, Linear Silicon Gate, DI Bipolar, DI Linear CMOS
Location: Yamaha,Hamamatsu, Japan
Line: Yamaha C5.6
Flow: Non-rad hard, Class M only

Assembly Operation(s)

Location: Intersil,Palm Bay, FL
Line: Compliant Hermetic
Flow: 841XXX, 240XXX, 352XXX
Location: Amkor, Philippines
Line: Hermetic (DIP, FP, Leadless CC, PGA)
Flow: Non-rad hard, Class M only
Location: Millenium Microtech, Chachoengsao, Thailand
Line: Compliant Hermetic (DIP, FP, Leadless CC, PGA)
Flow: Non-rad hard, Class B/Q only

Electrical Test Operation(s)

Location: Criteria/Austin, Texas
Line: Wafer Probe
Flow: Class Q, T, V
Location: Criterion Labs, Austin, TX
Line: Wafer Probe
Flow: Class Q, T, V
Location: Intersil,Milpitas, CA
Line: Test
Flow: Non-rad hard, Class M only
Location: Lingsen,Taichung, Taiwan
Line: Test
Flow: Non-rad hard, Class M only
Location: Intersil,Palm Bay, FL
Line: Compliant
Flow: Contact Manufacturer
Location: STATS ChipPAC,Kuala Lumpur, Malaysia
Line: Test
Flow: Contact Manufacturer
Location: Carsem (S), Ipoh, Malaysia
Line: Wafer Probe
Flow: Non-rad hard, Class B/Q only

Environmental Test Operation(s)

Location: Millenium Microtech, Chachoengsao, Thailand
Line: Compliant Hermetic
Flow: 86XXXX, 40-H721-052-XXX, 8*XXXXX, 9*XXXXX, 87XXXX, 240XXX

Intersil Corporation

Quality System Information

Intersil Corporation
1650 Robert J. Colan Blvd.
Palm Bay, FL 32905-3398
Website: http://www.intersil.com/cda/Support/contacts/
CAGE Code: 34371, Symbol Code: CDWO
Company Contact: Jeff Touvell, (321) 729-5602
Qualifying Activity Contact: Paul Granchi, (614) 692-9975
QML Status: Full QML Certification/Qualification
Radiation hardness level: 300 K
Class: Q,V,T,M

Technology Types:

Bipolar, CMOS, linear, CMOS SAJI

Product Types:

memories, logic, switches, timers, microprocessors, micro-peripherals

Environmental Test Operation(s)

Location: STATS ChipPAC,Kuala Lumpur, Malaysia
Line: Compliant Hermetic
Flow: 86XXXX, 40H-721-052-XXX, 8*XXXXX, 9*XXXXX, 87XXXX, 240XXX
Location: Intersil,Palm Bay, FL
Line: Compliant Hermetic
Flow: 86XXX, 40H-721-052-XXX,8*XXXXX, 9*XXXXX, 54XXXX, 87XXXX, 240XXX

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
Can	3-12		solder/gold	N/A
DIP	8-40		solder/gold	100 mil
Flatpack	8-48		gold	25/40/50 mil
LCC	3-44		solder/gold	30/40/50 mil
PGA		68	gold	100 mil

Kyocera America, Inc.

Quality System Information

Kyocera America, Inc.
8611 Balboa Avenue
San Diego, CA 92123-1580
Website: http://americas.kyocera.com/kai/semiparts/
CAGE Code: 03KL1
Company Contact: Gregg Burnett, (858) 614-2589
Qualifying Activity Contact: Vinh Tran, (614) 692-0606
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: QV (A/T)

Technology Types:

Assembly/Test

Product Types:

Assembly Operation(s)

Location: San Diego, CA
Line: Kyocera America, Inc.
Flow: Full QML Class Q and V/S Assembly

Electrical Test Operation(s)

Location: San Diego, CA
Line: Kyocera America, Inc.
Flow: QML Flow

Environmental Test Operation(s)

Location: Milpitas, CA
Line: Hi-Reliability Microelectronics
Flow: TM2002, TM2007
Location: San Diego, CA
Line: Kyocera America, Inc.
Flow: QML Flow

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
BGA		1272 max	gold	N/A
DIP	64 max		gold	N/A
LCC	132 max		gold	N/A
LGA	1272 max		gold	N/A
PGA		540 max	gold	N/A
Quad Flat Pack	352 max		gold	N/A

Lansdale Semiconductor Incorporated

Quality System Information

Lansdale Semiconductor Incorporated
5245 South 39th St.
Phoenix, AZ 85040-9008
Website: http://www.lansdale.com/
CAGE Code: 58625
Company Contact: Lee Mathiesen, (602) 438-0123
Qualifying Activity Contact: Scott Thomas, (614) 692-0587
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q

Technology Types:

TTL, Bipolar, linear, ECL, CMOS, NMOS, others

Product Types:

logic, memory, microprocessors, others

Design Center(s)

Location: Original Manufacturer

Mask Development Center(s)

Location: Original Manufacturer
Line: Contact Manufacturer
Flow: Contact Manufacturer

Wafer Fabrication Operation(s)

Location: Tempe, AZ
Line: Panjit
Flow: Contact Manufacturer

Assembly Operation(s)

Location: Milpitas, CA
Line: Corwil
Flow: Standard Corwil QML Flow
Location: Milpitas, CA
Line: Golden Altos
Flow: Standard Golden Altos QML flow

Electrical Test Operation(s)

Location: Sunnyvale, CA
Line: EAST
Flow: Standard EAST Electrical Test procedures

Environmental Test Operation(s)

Location: Sunnyvale, CA
Line: EAST
Flow: Standard EAST 883 Environmental Test Procedures

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
Can	8-12		solder/gold	N/A
DIP	8-64		solder	
Flatpack	10-64		solder/gold	
LCC	20-132		solder/gold	

Linear Technology

Quality System Information

Linear Technology
720 Sycamore Drive
Milpitas, CA 95035-7406
Website: http://www.linear.com/
CAGE Code: 64155, Symbol Code: CENU
Company Contact: Regina Soares, (408) 432-1900
Qualifying Activity Contact: Michael Grammens, (614) 692-0604
QML Status: Full QML Certification/Qualification
Radiation hardness level: 100 K
Class: Q and V

Technology Types:

Bipolar, CMOS, BiCMOS

Product Types:

Qualified for: Comparators, power, op amps. Capable for: rf, wireless.

Design Center(s)

Location: Linear Technology, Plano, TX
Line: QM Plan 06-03-7039
Flow: Q,V,B,S,M
Location: Linear Technology, Milpitas, CA
Line: QM Plan 06-03-7039
Flow: Q,V,B,S,M
Location: Linear Technology, North Chelmsford, MA
Line: QM Plan 06-03-7039
Flow: Q,V,B,S,M
Location: Linear Technology, Yishun Industrial Park A, Singapore
Line: QM Plan 06-03-7039
Flow: Q,V,B,S,M
Location: Linear Technology, Aubum, NH
Line: QM Plan 06-03-7039
Flow: Q,V,B,S,M
Location: Linear Technology, Colorado Springs, CO
Line: QM Plan 06-03-7039
Flow: Q,V,B,S,M
Location: Linear Technology, Cary, NC
Line: QM Plan 06-03-7039
Flow: Q,V,B,S,M
Location: Linear Technology, Santa Barbara, CA
Line: QM Plan 06-03-7039
Flow: Q,V,B,S,M
Location: Linear Technology, Colchester, VT
Line: QM Plan 06-03-7039
Flow: Q,V,B,S,M
Location: Linear Technoogy, Ismaning, Germany
Line: QM Plan 06-03-7039
Flow: Q,V,B,S,M
Location: Linear Technology, Tempe, AZ
Line: QM Plan 06-03-7039
Flow: Q,V,B,S,M
Location: Linear Technoloby, Hangzhou, P.R.C
Line: QM Plan 06-03-7039
Flow: Q,V,B,S,M
Location: Linear Technology, Grass Valley, CA
Line: QM Plan 06-03-7039
Flow: Q,V,B,S,M

Mask Development Center(s)

Location: Mask Fab Contractors
Line: QM Plan 06-03-7039
Flow: Q,V,B,S,M

Wafer Fabrication Operation(s)

Linear Technology

Quality System Information

Linear Technology
720 Sycamore Drive
Milpitas, CA 95035-7406
Website: http://www.linear.com/
CAGE Code: 64155, Symbol Code: CENU
Company Contact: Regina Soares, (408) 432-1900
Qualifying Activity Contact: Michael Grammens, (614) 692-0604
QML Status: Full QML Certification/Qualification
Radiation hardness level: 100 K
Class: Q and V

Technology Types:

Bipolar, CMOS, BiCMOS

Product Types:

Qualified for: Comparators, power, op amps. Capable for: rf, wireless.

Wafer Fabrication Operation(s)

Location: Linear Technology, Milpitas, CA
Line: Fab 4 Hillview Bipolar, CMOS, BiCMOS
Flow: Q,V,B,S,M
Location: Linear Technology, Camas, WA
Line: Fab 3 Bipolar, CMOS, BiCMOS
Flow: Q,V,B,S,M

Assembly Operation(s)

Location: Linear Technology, Milpitas, CA
Line: Hillview, Ceramic and TO Can
Flow: Q,V,B,S,M
Location: Team Pacific, FTI Complex, Taguig, Philippines
Line: TO Can, with screening
Flow: Q, B, M
Location: Linear Technology, Milpitas, CA
Line: Ceramic and Metal Can, with Screening
Flow: Q,V,B,S,M
Location: Amkor/Anam, Muntinlupa, Philippines
Line: Ceramic, with screening
Flow: Q, B, M

Electrical Test Operation(s)

Location: Linear Technology, Penang, Malaysia
Line: Wafer Sort
Flow: Q,V,B,S,M
Location: Linear Technology, Milpitas, CA
Line: Wafer Sort & Final Test
Flow: Q,V,B,S,M
Location: Linear Technology, Yishun Industrial Park A, Singapore
Line: Screening and Group A
Flow: Q, B, M

Environmental Test Operation(s)

Location: Linear Technology, Milpitas, CA
Line: Burn-In and Quality Conformance Tests
Flow: Q,V,B,S,M
Location: Linear Technology, Yishun Industrial Park A, Singapore
Line: Burn-In and Quality Conformance Tests
Flow: Q, B, M

Linear Technology

Quality System Information

Linear Technology
720 Sycamore Drive
Milpitas, CA 95035-7406
Website: http://www.linear.com/
CAGE Code: 64155, Symbol Code: CENU
Company Contact: Regina Soares, (408) 432-1900
Qualifying Activity Contact: Michael Grammens, (614) 692-0604
QML Status: Full QML Certification/Qualification
Radiation hardness level: 100 K
Class: Q and V

Technology Types:

Bipolar, CMOS, BiCMOS

Product Types:

Qualified for: Comparators, power, op amps. Capable for: rf, wireless.

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
B/Brazed FP (Solder Seal)	10-14		solder or gold	50
CerDip (glass seal)	8-28		solder only	100
CerPack (glass seal)	10-14		solder only	50
LCC	20		solder only	50
Other Cans	2-10		solder only	
S/Brazed DIP	14-16		solder or gold	100

M.S. Kennedy Corp.

Quality System Information

M.S. Kennedy Corp.
6635 Kirkville Road
East Syracuse, NY 13057
Website: http://www.anaren.com/msk
CAGE Code: 51651
Company Contact: Daniel Miller, (315) 362-0760
Qualifying Activity Contact: Philip Patterson, (614) 692-2178
QML Status: Transitional QML Certification/Qualification
Radiation hardness level: 300 K
Class: Q and V

Technology Types:

TBD

Product Types:

TBD

Wafer Fabrication Operation(s)

Location: Milpitas, CA
Line: Linear Technology
Flow: Class Q/V

Assembly Operation(s)

Location: East Syracuse, NY
Line: Class Q/V
Flow: Class Q 2422-16054 / Class V 2422-14417

Electrical Test Operation(s)

Location: East Syracuse, NY
Line: Electrical Test
Flow: Class Q 2422-16054 / Class V 2422-14417

Environmental Test Operation(s)

Location: East Syracuse, NY
Line: Class Q/V
Flow: Class Q 2422-16054 / Class V 2422-14417

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
CerPack (glass seal)	10		tin-lead/gold	50 mil
TO257	3		tin-lead/gold	100 mil

Maxwell Technologies

Quality System Information

Maxwell Technologies
9244 Balboa Avenue
San Diego, CA 92123
CAGE Code: 68911
Company Contact: Dean Hulett, (858) 503-3413
Qualifying Activity Contact: Vinh Tran, (614) 692-0606
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q and V

Technology Types:

CMOS

Product Types:

A/D Converters, RAD PAK Technology, EE PROM

Design Center(s)

Location: San Diego, CA
Line: Maxwell
Flow: Characterization of Hitachi Die

Wafer Fabrication Operation(s)

Location: Pocatello, ID
Line: AMI, Fab 9
Flow: A/D Converter
Location: Kofu, Japan
Line: Hitatchi, K4 fab facility
Flow: 1 MEG EEPROM CMOS 1LM, 6 ", 0.8um

Assembly Operation(s)

Location: San Diego, CA
Line: Maxwell
Flow: Side Braze, Dip, Flat pack, LCC, ES-028
Location: San Diego, CA
Flow: Pyramid Class B Travelers

Electrical Test Operation(s)

Location: San Diego, CA
Line: Maxwell
Flow: Per device specification

Environmental Test Operation(s)

Location: San Diego, CA
Line: Maxwell
Flow: Screening per QCII-028

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
DIP	28-44		gold	100 mil
LLC	28-40		gold	50 mil

Microchip Technology (Thailand) Co., Ltd (MTHAI)

Quality System Information

Microchip Technology (Thailand) Co., Ltd (MTHAI)
17/2 Moo 18, Suwiontawong Road
Chachoengsao, Th 24000
CAGE Code: N/A
Company Contact: Padet Sang nikornnopkao, (66-38)845530
Qualifying Activity Contact: Andy Thacker, (614) 692-0589
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: QV (A/T)

Technology Types:

Assembly/Test

Product Types:

N/A

Assembly Operation(s)

Location: Chachoengsao, Thailand
Line: Hermetic and Plastic
Flow: Standard Military

Environmental Test Operation(s)

Location: Chachoengsao, Thailand
Line: Hermetic and Plastic
Flow: Screening

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
CerDip (glass seal)	8-40		solder	
CerPack (glass seal)	14-28		solder	
Flatpack	16,32		solder	
LCC	16-68		solder	
PGA		32,68,84,100	solder	
PLCC	20-84		solder	
PQFP	44-208		solder	
Plastic-DIP	18-28		solder	
Quad Flat Pack	28-64		solder	
SOIC	24,28		solder	
SOJ	24,28		solder	
Side-Braze	8-48		solder	

Microsemi Analog Mixed Signal Group

Quality System Information

Microsemi Analog Mixed Signal Group
11861 Western Avenue
Garden Grove, CA 92641-2119
Website: http://www.microsemi.com/contact/contactfind.asp
CAGE Code: 34333, Symbol Code: CESD
Company Contact: Gary Hancock, (714) 372-8334
Qualifying Activity Contact: Vinh Tran, (614) 692-0606
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q

Technology Types:

Bipolar

Product Types:

regulators, op amps, comparators, sense amps, drivers, transistor arrays

Design Center(s)

Location: Garden Grove, CA
Line: Linear
Flow: Contact Manufacturer

Mask Development Center(s)

Location: Garden Grove, CA
Line: Linear
Flow: Contact Manufacturer

Wafer Fabrication Operation(s)

Location: Garden Grove, CA
Line: Linear
Flow: SGM5900

Assembly Operation(s)

Location: Team Pacific, FTI Complex, Taguig, Philippines
Line: Linear
Flow: SGM5901, SGM5902
Location: Garden Grove, CA
Line: Linear
Flow: SGM5901, SGM5902
Location: Philippines, (PSI)
Line: Linear
Flow: SGM5901, SGM5902

Electrical Test Operation(s)

Location: Philippines, (PSI)
Line: Linear
Flow: SGM5901, SGM5902
Location: Garden Grove, CA
Line: Linear
Flow: SGM5901, SGM5902

Environmental Test Operation(s)

Location: Garden Grove, CA
Line: Linear
Flow: SGM5901, SGM5902
Location: Philippines, (PSI)
Line: Linear
Flow: SGM5901, SGM5902

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
Can	2-12		solder	N/A
DIP	8-18		solder	100 mil
Flatpack	10-24		solder	30-50 mil
LCC	20		solder	50 mil

Microsemi SoC

Quality System Information

Microsemi SoC
2061 Stierlin Court
Mountainview, CA 94043-4655
Website: http://www.actel.com/company/contact/offices/disti_na.aspx
CAGE Code: 0J4Z0
Company Contact: Lisa Konigsberg, (408) 522-7522
Qualifying Activity Contact: Vinh Tran, (614) 692-0606
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q

Technology Types:

CMOS Field Programmable Gate Arrays

Product Types:

Field Programmable Gate Array and Rad hard FPGA

Design Center(s)

Location: Sunnyvale CA
Line: Actel Design System
Flow: Per QM Plan 1-04-13047

Mask Development Center(s)

Location: Nagaokakyo, Kyoto, Japan
Line: MEC
Flow: Per QM Plan 1-04-1347
Location: Singapore,
Line: Photronics
Flow: Per QM Plan 1-04-1347
Location: Manassas, VA
Line: BAE Systems
Flow: Per QM Plan 1-04-1347

Wafer Fabrication Operation(s)

Location: Manassas, VA
Line: BAE Systems
Flow: 0.8 Micron CMOS Rad Hard FPGA
Location: Hsinchu City, Taiwan
Line: United Microelectronics corp (UMC)
Flow: .15um, 0.25um CMOS and .22u Flash/CMOS FPGA
Location: Regensburg, Germany
Line: Infineon Technologies
Flow: 0.25um Flash/CMOS FPGA
Location: Hsinchu City, Taiwan
Line: Winbond Electronics
Flow: .045um, 0.6um, 0.8um CMOS FPGA
Location: Nagaokakyo, Kyoto, Japan
Line: Matsushita (MEC)
Flow: 0.25um, 0.6um, 0.8um and 1.0um CMOS FPGA
Location: Singapore,
Line: Chartered Semiconductor (CSM)
Flow: 0.35 um, .45um, .6um CMOS FPGA

Assembly Operation(s)

Location: Manila, Philippines
Line: AAIP
Flow: Ceramic Quad Flatpak (CQFP) and Pin Grid Array (CPGA)
Location: San Jose, CA
Line: Six Sigma
Flow: Solder Dip
Location: Manassas, VA
Line: BAE Systems
Flow: Hermetic Package Assembly for J Lead Chip Carrier & Quad Flatpack & Column Grid Array (CCGA)

Microsemi SoC

Quality System Information

Microsemi SoC
2061 Stierlin Court
Mountainview, CA 94043-4655
Website: http://www.actel.com/company/contact/offices/disti_na.aspx
CAGE Code: 0J4Z0
Company Contact: Lisa Konigsberg, (408) 522-7522
Qualifying Activity Contact: Vinh Tran, (614) 692-0606
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q

Technology Types:

CMOS Field Programmable Gate Arrays

Product Types:

Field Programmable Gate Array and Rad hard FPGA

Assembly Operation(s)

Location: Fremont, CA
Line: Pantronix Corporation
Flow: Ceramic Quad Flatpak (CQFP) and Pin Grid Array (CPGA)
Location: San Diego, CA
Line: Kyocera
Flow: Ceramic Quad Flatpak (CQFP) and Pin Grid Array (CPGA)

Electrical Test Operation(s)

Location: Sunnyvale CA
Line: Actel
Flow: Per QM Plan 1-04-1347
Location: Manassas, VA
Line: BAE Systems
Flow: Per BAE Systems QM Plan Baseline Flow

Environmental Test Operation(s)

Location: Milpitas, CA
Line: RQE
Flow: Burn-In, Life Test
Location: Santa Clara, CA
Line: QP Semi
Flow: Group B & D
Location: San Jose, CA
Line: Six Sigma
Flow: Solderability
Location: Sunnyvale, CA
Line: AMER
Flow: Failure analysis, SEM analysis
Location: Spokane, WA
Line: Hi Rel
Flow: Failure analysis, SEM analysis
Location: Santa Clara, CA
Line: Riga Analytical Lab inc.
Flow: Failure analysis
Location: Sunnyvale, CA
Line: Accurel
Flow: Failure analysis, SEM analysis

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
Flatpack	256		gold	

Microsemi-Phoenix

Quality System Information

Microsemi-Phoenix
3601 East University Drive
Phoenix, AZ 85034-7217
CAGE Code: 54230
Company Contact: Tim Johnson, (602) 437-1520
Qualifying Activity Contact: Michael Grammens, (614) 692-0604
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q

Technology Types:

CMOS

Product Types:

SRAM

Design Center(s)

Location: N/A
Line: N/A
Flow: N/A

Mask Development Center(s)

Location: N/A
Line: N/A
Flow: N/A

Wafer Fabrication Operation(s)

Location: Puchased Die,
Line: Certified through TRB process 035A00002

Assembly Operation(s)

Location: Amertron, Pampanga, Philippines
Line: Ceramic, with screening
Flow: Q Only
Location: Fremont, CA
Line: Ceramic, with screening
Flow: Q Only
Location: Tempe, AZ
Line: Premier Semiconductor Services
Flow: Solder lead finish

Electrical Test Operation(s)

Location: White Electronic Designs, Phoenix, AZ
Line: Electrical Tests
Flow: Q Only
Location: Amertron, Pampanga, Philippines
Line: Electrical Test
Flow: Q Only

Environmental Test Operation(s)

Location: White Electronic Designs, Phoenix, AZ
Line: Conformance Tests
Flow: Q Only
Location: Amertron, Pampanga, Philippines
Line: Burn-in
Flow: Q Only

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
DIP-J lead			solder/gold	
DIP-S lead			solder/gold	
DIP-straight lead			solder/gold	
Flatpack			solder/gold	
LCC			solder/gold	
ZIP			solder/gold	

Micross Components

Quality System Information

Micross Components
7725 N. Orange Blossom Trail
Orlando, FL 32810-2696
Website: http://www.micross.com/
CAGE Code: 57300
Company Contact: Allen Wares, (407)296-5642
Qualifying Activity Contact: Scott Thomas, (614) 692-0587
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q&QV(A/T)

Technology Types:

OEM & Assembly/Test

Product Types:

Design Center(s)

Location: Original QML Manufacturer
Line: Original QML Design
Flow: Original QML Design

Wafer Fabrication Operation(s)

Location: Original QML Manufacturer
Line: Original QML Die
Flow: Original QML Die

Assembly Operation(s)

Location: Orlando, FL
Line: Chip Supply Assembly
Flow: TVL-0396

Electrical Test Operation(s)

Location: Orlando, FL
Line: Chip Supply Electrical Test
Flow: TVL--0397 thru TVL-0400

Environmental Test Operation(s)

Location: Orlando, FL
Line: Chip Supply Environmental Testing
Flow: TVL--0397 thru TVL-0400

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
Flatpack	7-304		solder/gold	Contact Mfr.
LCC	3-116		solder/gold	Contact Mfr.
Metal Can/TO-5	2-12		solder/gold	Contact Mfr.
PGA		6x5-19x19	solder/gold	Contact Mfr.
Side-Braze	8-64		solder/gold	Contact Mfr.

Minco Technology Labs

Quality System Information

Minco Technology Labs
1805 Rutherford Lane
Austin, TX 78754
Website: http://www.mincotech.com/
CAGE Code: 60264
Company Contact: Pat McCord, (512) 834-2022
Qualifying Activity Contact: Sean McNulty, (614) 692-8800
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q&Q(A/T)

Technology Types:

OEM & Assembly/Test

Product Types:

Various (Minco purchases die)

Assembly Operation(s)

Location: Austin, TX
Line: Minco Hermetic Assembly
Flow: Contact Minco

Electrical Test Operation(s)

Location: Austin, TX
Line: Electrical Test Operations
Flow: Per Applicable Device Spec

Environmental Test Operation(s)

Location: Austin, TX
Line: Minco Environmental Testing
Flow: Contact Minco

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
Contact Minco				

ON Semiconductor

Quality System Information

ON Semiconductor
2300 Buckskin Road
Pocatello, ID 83201-2798
Website: http://www.onsemi.com/
CAGE Code: 31471
Company Contact: Mona Hale, (208) 234-6084
Qualifying Activity Contact: Shing Yu, (614) 692-0588
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q and N

Technology Types:

CMOS .13u, .35u C3H/2LM, C3I/3LM; .5u C5A/2LM, C5B/3LM; .6u C6H/C6O/2LM, C6I/3LM; .8u CWB/C8H/2LM, CWC/C8I/3LM; 1.25u CAB/C8W/2LM; 1.5u ABM MixSig, 1.0u CYC/C8I/3LM, CYB/C8H/2LM

Product Types:

ASICs, gate arrays, standard cells

Design Center(s)

Location: ON Semiconductor, Dallas, TX
Line: QML Design
Flow: 12MQE00004A
Location: ON Semiconductor, American Fork, UT
Line: QML Design
Flow: 12MQE00004A
Location: ON Semiconductor, Pocatello, ID
Line: QML Design
Flow: 12MQE00004A
Location: ON Semiconductor, Lower Gwynedd, PA
Line: QML Design
Flow: 12MQE00004A

Mask Development Center(s)

Location: Wafer Fab Controlled
Line: Wafer Fab Controlled
Flow: 12MID7619163

Wafer Fabrication Operation(s)

Location: ON Semiconductor, Gresham, OR
Line: Y2: ONC18D
Flow: 12MID7019030
Location: ON Semiconductor, Pocatello, ID
Line: Fab 10: ABB,CAB,CYB,CYC,CWB,CWC,C6H,C6I,C60,C5A,C5B,C3H,C3I,C8I,C8H,C8W
Flow: 12MID7019030

Assembly Operation(s)

Location: Pantronix, Fremont, CA
Line: QML Ceramic Packages and hot solder dip
Flow: 12MID7020040
Location: Amkor Technology, Gwangju, South Korea
Line: QML Plastic Packages
Flow: 12MID7020037
Location: Amkor Technology, Metro Manila, Philippines
Line: QML Plastic Packages
Flow: 12MID7020037
Location: Criteria Labs, Austin, TX
Line: Hot Solder Dip
Flow: 12MID7050013
Location: Amkor Technology, Metro Manila, Philippines
Line: QML Plastic LQFP Packages
Flow: 12MID7020062
Location: Kyocera, San Diego, CA
Line: QML Ceramic DBGA Packages
Flow: 12MID7020040

ON Semiconductor

Quality System Information

ON Semiconductor
2300 Buckskin Road
Pocatello, ID 83201-2798
Website: http://www.onsemi.com/
CAGE Code: 31471
Company Contact: Mona Hale, (208) 234-6084
Qualifying Activity Contact: Shing Yu, (614) 692-0588
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q and N

Technology Types:

CMOS .13u, .35u C3H/2LM, C3I/3LM; .5u C5A/2LM, C5B/3LM; .6u C6H/C6O/2LM, C6I/3LM; .8u CWB/C8H/2LM, CWC/C8I/3LM; 1.25u CAB/C8W/2LM; 1.5u ABM MixSig, 1.0u CYC/C8I/3LM, CYB/C8H/2LM

Product Types:

ASICs, gate arrays, standard cells

Assembly Operation(s)

Location: Amkor Technology, Seoul, South Korea
Line: QML Plastic Packages
Flow: 12MID7020037
Location: Amkor Technology, Buchon, South Korea
Line: QML Plastic Packages
Flow: 12MID7020037
Location: Amkor Technology, Metro Manila, Philippines
Line: QML Ceramic Packages
Flow: 12MID7020040

Electrical Test Operation(s)

Location: ON Semiconductor, Carmona Philippines
Line: QML Technology Flow 12MID7050013 & 12MID7050026
Flow: 12MID7050024
Location: ON Semiconductor, Pocatello, ID
Line: QML Technology Flow 12MID7050013 & 12MID7050026
Flow: 12MID7450000

Environmental Test Operation(s)

Location: ON Semiconductor, Carmona Philippines
Line: QML Technology Flow 12MID7050013 & 12MID7050026
Flow: 12MID7020044
Location: Hi-Reliability Microelectronics, Milpitas, CA
Line: QML Technology Flow 12MID7050013 & 12MID7050026
Flow: 12MID7020044

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
CLCC	84		solder/gold	50 mil
CPGA	69-181		gold	100 mil
CQFP	100-352		gold	25 mil
DBGA	228-277		solder ball	50 mil
JLDCC	84		solder plate	50 mil
LFPBGA	84		solder plate	25 mil
LQFP	144-208		solder plate	20 mil
PBGA	564 balls		solder ball	50 mil
PQFP	44-240		solder plate	20 mil
SBGA	560 balls		solder ball	50 mil
Side-Braze	28-48		gold	100 mil

Pantronix Corporation

Quality System Information

Pantronix Corporation
2710 Lakeview Court
Fremont, CA 94538
CAGE Code: 2V289
Company Contact: Solomon Ching, 510-656-5898
Qualifying Activity Contact: Shing Yu, (614) 692-0588
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: QV (A/T)

Technology Types:

Assembly/Test

Product Types:

all (assembly and test house only)

Assembly Operation(s)

Location: Pantronix Corp, Fremont, CA
Line: Ceramic and TO Metal Can/Screening
Flow: Military (Class Q: 710-019 and Class V: 710-020)

Environmental Test Operation(s)

Location: Pantronix Corp, Fremont, CA
Line: Conformance Test
Flow: Military (Class Q: 710-026 and Class V: 710-027)

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
Can	3-10		solder/gold	
CerDip (glass seal)	8-40		solder	
CerPack (glass seal)	8-40		solder	
DIP	8-48		solder/gold	50-125 mil
Flatpack	10-32		solder/gold	25-75 mil
LCC	3-68		solder/gold	
PGA		48-144	solder/gold	100 mil
Quad Flat Pack	28-352		solder	
SOIC	8-28		solder	
SOJ	28-32		solder	
SSOP	16-28		solder	

PSI Technologies

Quality System Information

PSI Technologies

Taguig, Manilla
CAGE Code: N/A
Company Contact: Mabel Dalagan, 632 838 49 66
Qualifying Activity Contact: Andy Thacker, (614) 692-0589
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q (A/T)

Technology Types:

Assembly/Test

Product Types:

Assembly Operation(s)

Location: Taguig City 1604 , Metro Manilla, Philippines
Line: Hermetic
Flow: PS-CD-4085, PS-CP-4085, PS-MC-4006, PS-CL-4088, PS-TO-4089, and PS-FP-4087

Environmental Test Operation(s)

Location: Taguig City 1604 , Metro Manilla, Philippines
Line: Test
Flow: Contact Manufactuer

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
CLCC				
Can	3-12		solder	
CerDip (glass seal)				
CerPack (glass seal)				
Flatpack	8-48			
TO257				

Pyramid Semiconductor

Quality System Information

Pyramid Semiconductor
1249 Reamwood Ave
Sunnyvale, CA 94089
Website: http://www.pyramidsemiconductor.com/
CAGE Code: 3DTT2
Company Contact: Jagar Sandhu, (408) 734 8240
Qualifying Activity Contact: Philip Patterson, (614) 692-2178
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q

Technology Types:

0.5, 0.6, 0.8, 1.0 um CMOS Single poly double metal, 0.6, 0.8um 1P2M CMOS, 0.6um 1P2M Silicide CMOS, 0.25um 1P3M CMOS

Product Types:

SRAMs, EEPROMs, Microprocessor, EEPROM, , Processor Interface

Design Center(s)

Location: Sunnyvale, CA
Line: CMOS
Flow: Contact Pyramid Semiconductor

Mask Development Center(s)

Location: Pocatello, ID
Line: CWB, C8H
Flow: ON Semiconductor (formerly AMIS) QML Flow
Location: Hsin-Chu,
Line: TSMC Mask
Flow: TSMC ISO 9000 Flow

Wafer Fabrication Operation(s)

Location: Pocatello, ID
Line: CWB, C8H
Flow: ON Semiconductor (formerly AMIS) QML Flow
Location: Hsin-Chu,
Line: TSMC Fab 2A
Flow: TSMC ISO-9000 Flow

Assembly Operation(s)

Location: Milpitas, CA
Line: Corwil
Flow: Ceramic with glass seal flow, Cerpack
Location: Sunnyvale, CA
Line: Pyramid Assembly Clean Roon
Flow: Pyramid Class B Travelers
Location: Millennium Microtech (Thailand) Co., Ltd.- (MMT), Chachoengsao,
Line: Milennium Microtech
Flow: Ceramic with glass seal flow, Cerdip

Electrical Test Operation(s)

Location: Sunnyvale, CA
Line: Pyramid
Flow: Per Lot Traveler

Environmental Test Operation(s)

Location: Milpitas, CA
Line: Hi-Rel Microelectronics
Flow: Group D, Constant Acceleration, Temperature Cycle, PIND
Location: Sunnyvale, CA
Line: Pyramid, Hermaticity Tests, Constant Acceleration, PIND, Temp Cycle
Flow: Pyramid Lot Traveler
Location: Milpitas, CA
Line: Golden Altos
Flow: Temp Cycle, Group D

Pyramid Semiconductor

Quality System Information

Pyramid Semiconductor
1249 Reamwood Ave
Sunnyvale, CA 94089
Website: http://www.pyramidsemiconductor.com/
CAGE Code: 3DTT2
Company Contact: Jagar Sandhu, (408) 734 8240
Qualifying Activity Contact: Philip Patterson, (614) 692-2178
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q

Technology Types:

0.5, 0.6, 0.8, 1.0 um CMOS Single poly double metal, 0.6, 0.8um 1P2M CMOS, 0.6um 1P2M Silicide CMOS, 0.25um 1P3M CMOS

Product Types:

SRAMs, EEPROMs, Microprocessor, EEPROM, , Processor Interface

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
DIP	16-64		solder/gold	50-100 mil
Flatpack	28-160		solder/gold	25-50 mil
LCC	18-36		solder/gold	40, 50 mil
PGA		68-179	solder/gold	100 mil

Rochester Electronics, LLC

Quality System Information

Rochester Electronics, LLC
16 Malcolm Hoyt Drive
Newburyport, MA 01950
Website: http://www.rocelec.com
CAGE Code: 3V146
Company Contact: Steve Hirschfeld, (978) 462-9332
Qualifying Activity Contact: Jonathan Puhalsky, (614) 692-2458
QML Status: Full QML Certification/Qualification
Radiation hardness level: NSC,30-300
Class: Q and V

Technology Types:

CMOS, NMOS, HCMOS, BPTTL, Schottky TTL, FAST, FACT BiCMOS

Product Types:

Logic, Memory, Linear, Interface, Microprocessor, Micorcontroller

Design Center(s)

Location: Desert Microtechnology Assoc.,Scottsdale AZ
Line: Subcontractors Re-design of OEM licensed devices
Flow: QIP91

Wafer Fabrication Operation(s)

Location: OEM Suppliers with EOL Agreements
Line: OEM Purchased Die
Flow: QIP 32
Location: Fairchild Semiconductor, S. Portland, ME
Line: Schottky, CMOS and BiCMOS
Flow: Q
Location: Xfab, Lubbuck, TX
Line: CMOS, BiCMOS
Flow: Q

Assembly Operation(s)

Location: Millennium Microtech, Bangkok, Thailand
Line: Hermetic Assembly and Environmental Screening
Flow: Q and V
Location: Golden Altos, Milpitas, CA
Line: Hermetic Assembly and Environmental Screening
Flow: Q and V

Electrical Test Operation(s)

Location: Rochester, Newburyport MA
Line: Digital, Analog and Mixed Signal Electrical Test
Flow: Q and V

Environmental Test Operation(s)

Location: Rochester, Newburyport MA
Line: Burn-in and Life Test, QCI Group D
Flow: Q and V

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
CQFP	64-132		solder/gold	50 mil
Can	2-12		solder/gold	50-400 mil
DIP	8-64		solder/gold	100 mil
Flatpack/QFP	10-56		solder/gold	50 mil
J-Lead Chip Carrier	28-84		solder/gold	50 mil
LCC	16-84		solder/gold	50 mil
PGA		11 x 11	solder/gold	100 mil

Semelab

Quality System Information

Semelab

CAGE Code: U3158
Company Contact: David Hall, 01455 552505
Qualifying Activity Contact: Andy Thacker, (614) 692-0589
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q

Technology Types:

Product Types:

Linear IC

Wafer Fabrication Operation(s)

Location: Semifab, Scotland

Assembly Operation(s)

Location: Lutterworth, England
Line: Hermetic metal can
Location: Lutterworth, England
Line: Hermetic CerDip

Electrical Test Operation(s)

Location: Lutterworth, England
Line: Linear Test

Environmental Test Operation(s)

Location: Lutterworth, England
Line: Linear Screening

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
Can	2,3		solder	
CerDip (glass seal)	8,14,16,18		solder	

Silicon Turnkey Solutions

Quality System Information

Silicon Turnkey Solutions
801 Buckeye Court
Milpitas, CA 95035
Website: http://www.sts-usa.com/
CAGE Code: 1VVP6
Company Contact: Madho Dhouni, (310) 259-9326
Qualifying Activity Contact: Michael Grammens, (614) 692-0604
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q (A/T)

Technology Types:

Assembly/Test

Product Types:

N/A

Assembly Operation(s)

Location: Milpitas, CA
Line: STS
Flow: Hermetic Single Die/Planar MCM Class Q Flow Rev 01

Electrical Test Operation(s)

Location: Milpitas, CA
Line: STS
Flow: DLA Laboratory Suitability per VQC-15-028944

Environmental Test Operation(s)

Location: Milpitas, CA
Line: STS
Flow: DLA Laboratory Suitability per VQC-15-028944

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
Flatpack	40-352		Gold	25-50 mil

Six Sigma

Quality System Information

Six Sigma
905 Montague Expressway
Milpitas, CA 95035-6817
Website: http://www.sixsigmaservices.com/
CAGE Code: 1PBC8
Company Contact: Russ Winslow, (408) 956 0100
Qualifying Activity Contact: Paul Granchi, (614) 692-0604
QML Status: Full QML Certification/Qualification
Class: Q and V

Technology Types:

Product Types:

Assembly Operation(s)

Location: Milpitas, CA
Line: Column Attach
Flow: PR-2010
Location: Milpitas, CA
Line: Hot Solder Dip
Flow: PR-2001

Environmental Test Operation(s)

Location: Milpitas, CA
Line: Test Services
Flow: TS-2001

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
BGA		ALL	Solder	>= 1 mil
CGA	4-2400		Solder	>= 1 mil
LCC	4-2400		Solder	>= 1 mil
LGA	4-2400		Solder	>= 1 mil
OFN	4-2400		Solder	>= 1 mil

SRI International

Quality System Information

SRI International
201 Washington Road
Princeton, NJ 08540-6449
CAGE Code: 0DKS7
Company Contact: George Kocsis, (609) 734-2933
Qualifying Activity Contact: Philip Patterson, (614) 692-2458
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q

Technology Types:

5V 1.5 um BiCMOS, 20V BiCMOS, 100 V Driver/1.5um, 5V 0.8um, CMOS 5V 1.2um BiCMOS, 1.2 um SOS Rad Hard, 0.8um ECL, Dielectrically Isolated Schottky

Product Types:

TTL, CMOS, CMOS4000, HiNil, PMOS, NMOS, ECL, Schottky

Design Center(s)

Location: Princeton, NJ
Line: N/A
Flow: GEM Design Rules

Mask Development Center(s)

Location: Princeton, NJ
Line: Design
Flow: Photronics Brookfield, CT

Wafer Fabrication Operation(s)

Location: Princeton, NJ
Line: SRI International IC Center
Flow: GEM5VCOMB; GEMBICMOS2; GEMHV,GEM16 1.2u, GEM20 100v, SOSPRD, GEM 0.8u, DTI SHOT5V, DTI SHOT

Assembly Operation(s)

Location: Orlando, FL
Line: Chip Supply Inc
Flow: Hermetic, Solder Seal
Location: Fremont, CA
Line: Pantronix Corp, QML
Flow: Hermetic, Solder Seal
Location: Milpitas, CA
Line: Golden Altos corp.
Flow: Hermetic, Solder Seal

Electrical Test Operation(s)

Location: Sunnyvale, CA
Line: Engineering and Solutions Technology (EAST), LLC
Flow: Digital / Memory
Location: Round Rock, TX
Line: Anloy Technologies
Flow: Digital / Memory
Location: Princeton, NJ
Line: SRI International
Flow: Digital / Memory
Location: Austin, TX
Line: Austin Semiconductor, Inc.
Flow: Digital / Memory
Location: Milpitas, CA
Line: Hi-Rel Microelectronics
Flow: Digital / Memory

Environmental Test Operation(s)

Location: Milpitas, CA
Line: Golden Altos
Flow: MIL-STD-883
Location: Fremont, CA
Line: Pantronix Corp, QML
Flow: MIL-STD-883

SRI International

Quality System Information

SRI International
201 Washington Road
Princeton, NJ 08540-6449
CAGE Code: 0DKS7
Company Contact: George Kocsis, (609) 734-2933
Qualifying Activity Contact: Philip Patterson, (614) 692-2458
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q

Technology Types:

5V 1.5 um BiCMOS, 20V BiCMOS, 100 V Driver/1.5um, 5V 0.8um, CMOS 5V 1.2um BiCMOS, 1.2 um SOS Rad Hard, 0.8um ECL, Dielectrically Isolated Schottky

Product Types:

TTL, CMOS, CMOS4000, HiNil, PMOS, NMOS, ECL, Schottky

Environmental Test Operation(s)

Location: Austin, TX
Line: Austin Semiconductor, Inc.
Flow: MIL-STD-883
Location: Milpitas, CA
Line: Hi-Rel Microelectronics
Flow: MIL-STD-883
Location: Princeton, NJ
Line: SRI International
Flow: MIL-STD-883

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
DIP	64		solder/gold	as required
Flatpack	48		solder/gold	as required
LCC	76		solder/gold	as required
LGA			gold	as required
PGA			solder/gold	as required
QFP	68		solder/gold	as required

STMicroelectronics

Quality System Information

STMicroelectronics
3 rue de suisse CS60816
35208 Rennes Cedex 2 FR
Website: http://www.st.com/stonline/address/distrib/index.htm
CAGE Code: F8859
Company Contact: Sylvie Peron, 33299264800
Qualifying Activity Contact: Jonathan Puhalsky, (614) 692-2458
QML Status: Full QML Certification/Qualification
Radiation hardness level: 300 K
Class: Q and V

Technology Types:

2µm (RHF voltage regulators & operational amplifiers), 0.7µm (RHF ACMOS), 0.35µm (RHR/RHF VCX), 0.25µm (RHF AD converters)

Product Types:

buffers, flip flops, latches, counters, registers, multiplexers, decoders, voltage regulators, operational amplifiers, AD converters

Design Center(s)

Location: Catania, Italy
Line: N/A
Flow: RHF ACMOS, RHF voltage regulators, RHF operational amplifiers, RHR/RHF VCX, RHF AD converters

Wafer Fabrication Operation(s)

Location: Carrollton, TX
Line: RHF ACMOS
Flow: confidential, contact manufacturer
Location: Crolles, France
Line: RHF VCX Family
Flow: confidential, contact manufacturer
Location: Crolles, France
Line: RHF AD converters
Flow: confidential, contact manufacturer
Location: Carrollton, TX
Line: RHF voltage regulatores + RHF operational amplifiers
Flow: confidential, contact manufacturer
Location: Agrate, Italy
Line: RHF ACMOS
Flow: confidential, contact manufacturer

Assembly Operation(s)

Location: Rennes, France
Line: Hermetic Assembly
Flow: 7084427 QML Q
Location: Rennes, France
Line: Hermetic Assembly
Flow: 7086591 QML V

Environmental Test Operation(s)

Location: Rennes, France
Line: N/A
Flow: Contact Manufacturer

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
DIP	up to 24		solder/gold	
Flatpack	up to 48		solder/gold	
SMD	up to 5		solder/gold	
TO	3		solder/gold	

Texas Instruments

Quality System Information

Texas Instruments
6412 Highway 75 South
Sherman, TX 75090
Website: http://focus.ti.com/hirel/howtobuy.shtml
CAGE Code: 01295
Company Contact: Brent Rhoton, (903) 487-3305
Qualifying Activity Contact: Andy Thacker, (614) 692-0589
QML Status: Full QML Certification/Qualification
Radiation hardness level: 100K
Class: Q,N, V

Technology Types:

TTL, ABT, AC/ACT, AHC/AHCT, ALV, CHC/HCT, LV/LVC/LVCH, LVT/LVTH, S/LS/ALS, TTL, BCT, CDC, CBT, FCT, FAST, CMOS, HCMOS, BICMOS, SiGe, Bipolar

Product Types:

DSP, op amp, comparators, DAC/ADC, mixed signal, voltage regulators, interface, supervisors, general purpose linear and logic, power management, fifo, jtag, Bipolar logic, MCOMS Logic, programmable logic, microcontrollers, memory, ASIC

Design Center(s)

Location: Houston, TX
Line: DSP Design
Flow: DSP Design Rules
Location: Sherman, TX
Line: MPD ASIC / FIFO / JTAG / Mixed Signal
Flow: Military Products Design Rules
Location: Sherman, TX
Line: SLL Logic/Mixed Signal/ Linear
Flow: HVAL Design Rules
Location: Dallas, TX
Line: DSP Design
Flow: DSP Design Rules
Location: Freising, Germany
Line: Logic / Mixed Signal / Linear
Flow: HVAL Design Rules
Location: Hiji, Japan
Line: Logic
Flow: Logic Design Rules
Location: Dallas, TX
Line: Linear Design
Flow: Linear Design Rules
Location: Dallas, TX
Line: Logic Design
Flow: Logic Design Rules
Location: Bangalore, India
Line: DSP/MCU/ASIC
Flow: HPA/DSP/MCU

Mask Development Center(s)

Location: Tokyo,
Line: ASIC / FIFO
Flow: Contact Texas Instruments
Location: Dallas, TX
Line: Toppan
Flow: Contact Texas Instruments

Wafer Fabrication Operation(s)

Location: Sherman, TX
Line: Logic, Analog/Mixed Signal, Programmable Logic (Classes Q and V)
Flow: SFAB
Location: Houston, TX
Line: Logic, Interface, ASIC, DSP (Class Q)
Flow: HFAB

Texas Instruments

Quality System Information

Texas Instruments
6412 Highway 75 South
Sherman, TX 75090
Website: http://focus.ti.com/hirel/howtobuy.shtml
CAGE Code: 01295
Company Contact: Brent Rhoton, (903) 487-3305
Qualifying Activity Contact: Andy Thacker, (614) 692-0589
QML Status: Full QML Certification/Qualification
Radiation hardness level: 100K
Class: Q,N, V

Technology Types:

TTL, ABT, AC/ACT, AHC/AHCT, ALV, CHC/HCT, LV/LVC/LVCH, LVT/LVTH, S/LS/ALS, TTL, BCT, CDC, CBT, FCT, FAST, CMOS, HCMOS, BICMOS, SiGe, Bipolar

Product Types:

DSP, op amp, comparators, DAC/ADC, mixed signal, voltage regulators, interface, supervisors, general purpose linear and logic, power management, fifo, jtag, Bipolar logic, MCOMS Logic, programmable logic, microcontrollers, memory, ASIC

Wafer Fabrication Operation(s)

Location: Freising, Germany
Line: Logic, Interface, Analog/Mixed Signal (Class Q and V)
Flow: FFAB
Location: Miho, Japan
Line: DSP (Class Q)
Flow: Contact Texas Instruments
Location: Dallas, TX
Line: Logic, Interface, Analog/Mixed Signal, ASIC, DSP (Classes Q and V)
Flow: DFAB
Location: Merrimack, NH
Line: MFAB (Classes Q and V) Die/Wafer Bank only
Flow: Contact Texas Instruments
Location: Dallas, TX
Line: DSP (Class Q and V)
Flow: DMOSV
Location: Anam, Korea
Line: DSP
Flow: ANAM1
Location: Tucson, AZ
Line: Analog/Mixed Signal (Die/Wafer Bank Only)
Flow: Contact Texas Instruments
Location: Hiji, Japan
Line: Contact Texas Instruments (Class Q)
Flow: Contact Texas Instruments

Assembly Operation(s)

Location: Kuala Lumpur, Malaysia
Line: Plastic Packaging only
Flow: 07-015-1001,1002,1003,1004,0610
Location: San Diego, CA (Kyocera)
Line: Special Products Assembly (Hermetic) (Classes Q and V)
Flow: Contact Texas Instruments
Location: Bangkok, Thailand (Mthai)
Line: Special Products Assembly (Hermetic) (Classes Q and V)
Flow: Contact Texas Instruments
Location: Tokyo,
Line: TAB Assembly
Flow: Contact Texas Instruments
Location: Taipei, Taiwan (TITL)
Line: Plastic
Flow: 07-012-1601,1901
Location: Singapore
Line: Plastic (High Pin Count)
Flow: Contact Texas Instruments

Texas Instruments

Quality System Information

Texas Instruments
6412 Highway 75 South
Sherman, TX 75090
Website: http://focus.ti.com/hirel/howtobuy.shtml
CAGE Code: 01295
Company Contact: Brent Rhoton, (903) 487-3305
Qualifying Activity Contact: Andy Thacker, (614) 692-0589
QML Status: Full QML Certification/Qualification
Radiation hardness level: 100K
Class: Q,N, V

Technology Types:

TTL, ABT, AC/ACT, AHC/AHCT, ALV, CHC/HCT, LV/LVC/LVCH, LVT/LVTH, S/LS/ALS, TTL, BCT, CDC, CBT, FCT, FAST, CMOS, HCMOS, BICMOS, SiGe, Bipolar

Product Types:

DSP, op amp, comparators, DAC/ADC, mixed signal, voltage regulators, interface, supervisors, general purpose linear and logic, power management, fifo, jtag, Bipolar logic, MCOMS Logic, programmable logic, microcontrollers, memory, ASIC

Assembly Operation(s)

Location: Baguio City, Philippines (TIPI)
Line: Contact Texas Instruments (Plastic)
Flow: Contact Texas Instruments

Electrical Test Operation(s)

Location: Taipei, Taiwan (TITL)
Line: Special Products Test (Classes Q and N)
Flow: Contact Texas Instruments
Location: Baguio City, Philippines (TIPI)
Line: Contact Texas Instruments (Classes Q and V)
Flow: Contact Texas Instruments
Location: Sherman, TX
Line: Special Products Test (Class Q)
Flow: Sherman Test Floor
Location: Houston, TX
Line: Special Products Test (Class Q)
Flow: Houston Test Floor
Location: Dallas, TX (CLAB)
Line: Special Product (Class Q)
Flow: Contact Texas Instruments
Location: Kuala Lumpur, Malaysia
Line: Test (Class Q)
Flow: Contact Texas Instruments
Location: Bangkok, Thailand (Mthai)
Line: Test (Classes Q and V)
Flow: Contact Texas Instruments

Environmental Test Operation(s)

Location: Dallas, TX
Line: Environmental Test (Classes Q and V)
Flow: Contact Texas Instruments
Location: Bangkok, Thailand (Mthai)
Line: Environmental Test (Classes Q and V)
Flow: Contact Texas Instruments
Location: Houston, TX
Line: Environmental Test (Classes Q and V)
Flow: Contact Texas Instruments

Texas Instruments

Quality System Information

Texas Instruments
6412 Highway 75 South
Sherman, TX 75090
Website: http://focus.ti.com/hirel/howtobuy.shtml
CAGE Code: 01295
Company Contact: Brent Rhoton, (903) 487-3305
Qualifying Activity Contact: Andy Thacker, (614) 692-0589
QML Status: Full QML Certification/Qualification
Radiation hardness level: 100K
Class: Q,N, V

Technology Types:

TTL, ABT, AC/ACT, AHC/AHCT, ALV, CHC/HCT, LV/LVC/LVCH, LVT/LVTH, S/LS/ALS, TTL, BCT, CDC, CBT, FCT, FAST, CMOS, HCMOS, BICMOS, SiGe, Bipolar

Product Types:

DSP, op amp, comparators, DAC/ADC, mixed signal, voltage regulators, interface, supervisors, general purpose linear and logic, power management, fifo, jtag, Bipolar logic, MCOMS Logic, programmable logic, microcontrollers, memory, ASIC

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
BGA		144-429	Eu Solder Balls	Contact Mfr
DIP	8-40		SN63/PB37	
Flatpack	8-56		SN63/PB37	Contact Mfr
LCC	20-44		SN63/PB37	
LGA	429		Au Plate	Contact Mfr
PGA		80-324	SN63/PB37+Au Pl	Contact Mfr
Quad Flat Pack	68-408		SN63/PB37+Au Pl	Contact Mfr

Texas Instruments SVA (formerly National Semiconductor)

Quality System Information

Texas Instruments SVA (formerly National Semiconductor)
2900 Semiconductor Drive
Santa Clara, CA 95052-8090
Website: http://www.ti.com/contacts/
CAGE Code: 27014, Symbol Code: CCXP
Company Contact: Dennis Tanguay, (408) 721-3509
Qualifying Activity Contact: Shing Yu, (614) 692-0588
QML Status: Full QML Certification/Qualification
Radiation hardness level: 30-300 K
Class: Q and V

Technology Types:

BiPolar, CMOS, BiCMOS

Product Types:

Analog, linear, interface, LVDS

Design Center(s)

Location: TISVA, Greenock, Scotland
Line: TISVA Design Rules
Flow: Q and V
Location: TISVA, Santa Clara, CA
Line: TISVA Design Rules
Flow: Q and V
Location: TISVA, Furstenfeldbruck, Germany
Line: TISVA Design Rules
Flow: Q and V
Location: TISVA, Takada, Japan
Line: TISVA Design Rules
Flow: Q and V
Location: TISVA, Arlington, TX (Die Bank)
Line: TISVA Design Rules
Flow: Q and V

Mask Development Center(s)

Location: Dupont, Santa Clara, CA
Line: TISVA Specific
Flow: Q and V
Location: Photronics, Danbury, CT
Line: TISVA Specific
Flow: Q and V
Location: Dupont, Rousett, France
Line: TISVA Specific
Flow: Q and V

Wafer Fabrication Operation(s)

Location: TISVA, Greenock, Scotland
Line: Fab 3, 6" (BiPolar and CMOS)
Flow: Q and V
Location: Quality Backgrind and Backmetal Service, Santa Clara, CA
Line: Wafer Thinning
Flow: Selected analog parts (Q and V)
Location: Scientific Coating Lab, Santa Clara, CA
Line: Wafer Backside Gold
Flow: Selected analog parts (Q and V)
Location: TISVA, Arlington, TX (Die Bank)
Line: 6" (BiPolar and CMOS)
Flow: Q and V
Location: TISVA, South Portland, ME
Line: 8" CMOS 7, CMOS 8, CMOS 9
Flow: Q and V
Location: Taiwan Semiconductor Manuf. Co., Hsin-Chu, Taiwan
Line: 8" (BiPolar and CMOS)
Flow: Q only

Texas Instruments SVA (formerly National Semiconductor)

Quality System Information

Texas Instruments SVA (formerly National Semiconductor)
2900 Semiconductor Drive
Santa Clara, CA 95052-8090
Website: http://www.ti.com/contacts/
CAGE Code: 27014, Symbol Code: CCXP
Company Contact: Dennis Tanguay, (408) 721-3509
Qualifying Activity Contact: Shing Yu, (614) 692-0588
QML Status: Full QML Certification/Qualification
Radiation hardness level: 30-300 K
Class: Q and V

Technology Types:

BiPolar, CMOS, BiCMOS

Product Types:

Analog, linear, interface, LVDS

Assembly Operation(s)

Location: Team Pacific, FTI Complex, Taguig, Philippines
Line: TO Metal Can, with selected screen tests (no burn-in)
Flow: Q only
Location: Amkor Technology, site P1, Muntinlupa City, Philippines
Line: Ceramic, with selected screen tests (no burn-in)
Flow: Q and V
Location: Golden Altos, Milpitas CA
Line: high pin count ceramics, with selected screen tests (no burn-in)
Flow: Q and V
Location: Golden Altos, Milpitas CA
Line: TO Metal Can, wth selected screen tests (no burn-in)
Flow: V
Location: Millennium Microtech, Bangkok, Thailand
Line: Ceramic, with selected screen tests (no burn-in)
Flow: Q and V
Location: TISVA Melaka, Malaysia
Line: Wafer Thinning
Flow: Selected analog parts (Q and V)

Electrical Test Operation(s)

Location: TISVA Melaka, Malaysia
Line: Electrical Test
Flow: Q and V
Location: TISVA, Santa Clara, CA
Line: Electrical Test
Flow: Q and V

Environmental Test Operation(s)

Location: TISVA, Santa Clara, CA
Line: Burn-In, Life Test, Ionizing Radiation (Total Dose)
Flow: Q and V
Location: contact manufacturer
Line: Burn-In, Life Test
Flow: Q and V
Location: White Sands Missile Range, New Mexico
Line: Ionizing Radiation (Low Dose)
Flow: Q and V
Location: Aeroflex RAD, Colorado Springs, CO
Line: Ionizing Radiation (Low Dose)
Flow: Q and V
Location: TISVA Melaka, Malaysia
Line: Group B, D
Flow: Q and V
Location: TISVA, South Portland, ME
Line: Ionizing Radiation (Total Dose)
Flow: Q and V

Texas Instruments SVA (formerly National Semiconductor)

Quality System Information

Texas Instruments SVA (formerly National Semiconductor)
2900 Semiconductor Drive
Santa Clara, CA 95052-8090
Website: http://www.ti.com/contacts/
CAGE Code: 27014, Symbol Code: CCXP
Company Contact: Dennis Tanguay, (408) 721-3509
Qualifying Activity Contact: Shing Yu, (614) 692-0588
QML Status: Full QML Certification/Qualification
Radiation hardness level: 30-300 K
Class: Q and V

Technology Types:

BiPolar, CMOS, BiCMOS

Product Types:

Analog, linear, interface, LVDS

Environmental Test Operation(s)

Location: Golden Altos, Milpitas CA
Line: Group B, D
Flow: Q and V

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
CerDip (glass seal)	8, 14, 16		solder	100 mil
CerPack (glass seal)	10, 14, 16, 20		solder	50 mil
Leadless Chip Carrier	20, 28		solder	50 mil
Other Cans	2, 3, 8, 10		solder	100 and 200 mil
PGA		180 (15x15)	gold	100 mil
Quad CerPack - Gull Wing	128		gold	20 mil
Quad Cerpack	48, 68		gold	25 and 50 mil
S/Brazed DIP	14, 24		solder	100 mil
SOIC	10, 14, 16		solder	50 mil
TO-3 Can	2		solder	430 mil

Vishay-Siliconix

Quality System Information

Vishay-Siliconix
2201 Laurelwood Road
Santa Clara, CA 95056-0951
Website: http://www.vishay.com/company/contacts/#sales
CAGE Code: 17856, Symbol Code: CDBN
Company Contact: Liz Korntved, (408) 970-5640
Qualifying Activity Contact: Michael Grammens, (614) 692-0604
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q

Technology Types:

Bipolar, metal gate II, silicon gate I& II LDMOS

Product Types:

analog switches, analog multiplexers, video switch

Design Center(s)

Location: Santa Clara, CA
Line: Design
Flow: 4149

Mask Development Center(s)

Location: Santa Clara, CA
Line: Mask
Flow: 4016

Assembly Operation(s)

Location: Santa Clara, CA
Line: Metal Can Assembly and Back-up Assembly
Flow: PF-S-0005-FT Rev AX
Line: Military Assemlby
Flow: Sub-001APPANP01 Rev AC

Electrical Test Operation(s)

Location: Santa Clara, CA
Line: Electrical Test
Flow: PF-S-0005-FT Rev AX

Environmental Test Operation(s)

Location: Santa Clara, CA
Line: Environmental
Flow: PF-S-0005-FT Rev AX

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
Can	10		solder/gold	N/A
CerDip (glass seal)	8-28		solder	
Flatpack	14-16		solder/gold	
LCC	20-28		solder/gold	
Side-Braze	14-28		solder/gold	

Xilinx Incorporated

Quality System Information

Xilinx Incorporated
2100 Logic Drive
San Jose, CA 95124-3450
Website: http://www.xilinx.com/company/sales/ww_disti.htm
CAGE Code: 68994
Company Contact: Craig Taylor, (408) 626 6381
Qualifying Activity Contact: Philip Patterson, (614) 692-2178
QML Status: Full QML Certification/Qualification
Radiation hardness level: 100 K
Class: Q, N

Technology Types:

0.6um, 0.5um, 0.35um, 0.22um, 0.18 um 0.15 um, 0.13 um, CMOS , 0.6um CMOS floating gate

Product Types:

logic, gate arrays, FPGA, EPROM, SPROM

Design Center(s)

Location: San Jose, CA
Line: Programmable Platforms Development (PPD)
Flow: DPS0021
Location: Longmont, Colorado
Line: Programmable Platforms Development (PPD), Software Development
Flow: DPS0021

Mask Development Center(s)

Location: San Jose, CA
Line: Programmable Platforms Development (PPD)
Flow: DSP0015

Wafer Fabrication Operation(s)

Location: Hsin-chu Taiwan, UMC
Line: 8 and 12 inch, 0.35um, 0.25um, 0.18um, 0.15um, 0.13 um
Flow: per UMC (new & legacy product)

Assembly Operation(s)

Location: Amkor, Philippines
Line: Plastic, Ceramic
Flow: MFC0067, MFC0068, MFC0007, MFC0008
Location: Amkor, Korea
Line: Plastic
Flow: MFC0067, MFC0068
Location: Six Sigma, Milpitas, CA
Line: Column attach (CG717 5962-02530 ONLY)
Flow: Per Six Sigma
Location: SPIL, Taiwan
Line: Bump
Flow: MFC0082

Electrical Test Operation(s)

Location: San Jose, CA
Line: Xilinx (Backup)
Flow: QAP0094, MFC0067, MFC0068
Location: Silicon Turnkey Solutions (STS), Milpitas, CA
Line: Electrical Test
Flow: Product level TSC controls

Environmental Test Operation(s)

Location: Silicon Turnkey Solutions (STS), Milpitas, CA
Line: Burn-in / QCI
Flow: BIC0009, ADQ0007

Xilinx Incorporated

Quality System Information

Xilinx Incorporated
2100 Logic Drive
San Jose, CA 95124-3450
Website: http://www.xilinx.com/company/sales/ww_disti.htm
CAGE Code: 68994
Company Contact: Craig Taylor, (408) 626 6381
Qualifying Activity Contact: Philip Patterson, (614) 692-2178
QML Status: Full QML Certification/Qualification
Radiation hardness level: 100 K
Class: Q, N

Technology Types:

0.6um, 0.5um, 0.35um, 0.22um, 0.18 um 0.15 um, 0.13 um, CMOS , 0.6um CMOS floating gate

Product Types:

logic, gate arrays, FPGA, EPROM, SPROM

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
CF	1114		90Pb/10Sn Col	40 mil
CLCC	44		solder	50 mil
CQFP	100-228		gold plate	25 mil
CSGA (CG)	560, 717		90Pb/10Sn Col	25 mil
Cerdip (DD)	8		solder dip	100 mil
FG	256-1156		63Sn//37Pb Ball	40 mil
HQFP	208-240		Solder plate	20 mil
PGA		68-559	gold plate	50mil/100mil
PQFP	100-240		Solder plate	50 mil
Plastic BGA	225-728		63Sn//37Pb Ball	50-60 mil
SOIC	20		Solder plate	50 mil
VQFP	4		Solder plate	32 mil

XTREME Semiconductor

Quality System Information

XTREME Semiconductor
12908 Trails End Road, Suite E
Leander, TX 78641
CAGE Code: 3RNH0
Company Contact: Marty Lanning, (602) 368-5575
Qualifying Activity Contact: Sean McNulty, (614) 692-8800
QML Status: Full QML Certification/Qualification
Radiation hardness level: N/A
Class: Q

Technology Types:

1.2um CMOS, 3.0 um CMOS

Product Types:

A/D Converter

Design Center(s)

Location: Contact Xtreme Semiconductor
Line: OEM
Flow: OEM

Mask Development Center(s)

Location: Pocatello, ID
Line: ON Semiconductor (formerly AMIS)
Flow: Contact XTREME Semiconductor

Wafer Fabrication Operation(s)

Location: Pocatello, ID
Line: AMI Semiconductor
Flow: QML Flow

Assembly Operation(s)

Location: San Diego, CA
Line: Maxwell Technology
Flow: Military Hermetic QM Q/V Certified/Qualified
Location: Milpitas, CA
Line: Golden Altos
Flow: Military Hermetic QML Q Certified/Qualified

Electrical Test Operation(s)

Location: San Diego, CA
Line: Maxwell Technology
Flow: Military Hermetic QML Q Certified ,Tested to SMD specification
Location: Leander, TX
Line: Anloy Technology
Flow: DLA Suitable Commercial Lab for 883 Electrical Test, Tested to SMD specifications

Environmental Test Operation(s)

Location: Milpitas, CA
Line: Golden Altos
Flow: Military Hermetic QML Q Certified/Qualified
Location: San Diego, CA
Line: Maxwell Technology
Flow: Military Hermetic QML Q Certified/Qualified

Package Information 2/

Type	Lead Range	Matrix Size	Lead Finish	Lead Pitch
DIP	8-64		Solder/Gold	100 mil
LCC	4-84		Solder/Gold	40-50 mil

QML Manufacturer Military Distributors

This section contains a list of QML manufacturers' military distributors. This information was supplied by the QML manufacturers and is provided in QML-38535 as a service from DLA Land and Maritime-VQC. This listing is provided as a service only and is in no way intended to be an endorsement or restriction by the Government. For additional information or further update contact the applicable manufacturer in the QML Program Status section.

Analog Devices, 7910 Triad Center Dr, Greensboro,, NC 27409

Distributors:
Avnet, 2211 S. 47th Street, Phoenix, AZ 85034
Digi-Key, 701 Brooks Avenue South, Thief River Falls, MN 56701
Rochester Electronics, 10 Malcolm Hoyt Drive, Newburyport, MA 01950-4018
Arrow Electronics, 50 Marcus Drive, Melville, NY 11747-4210

Atmel-Nantes, La Chantrerie BP 70602, 44306 Nantes Cedex 3,, FR

Distributors:
All American Semiconductor, 16115 Northwest 52nd Avenue, Miami, FL 33014
Arrow Electronics, 50 Marcus Drive, Melville, NY 11747-4210
Avnet, 2211 S. 47th Street, Phoenix, AZ 85034

Cypress Semiconductor, 198 Champion Court, San Jose,, CA 95134-1709

Distributors:
Arrow Electronics, 50 Marcus Drive, Melville, NY 11747-4210

e2v aerospace and defense, inc. (DBA QP Semiconductor), 765 Sycamore Drive, Milpitas,, CA 95035

Distributors:
Arrow Electronics, 50 Marcus Drive, Melville, NY 11747-4210

Intersil Corporation, P O Box 37, Palm Bay,, FL 32905-3398

Distributors:
Avnet, 2211 S. 47th Street, Phoenix, AZ 85034
Arrow Electronics, 50 Marcus Drive, Melville, NY 11747-4210

Linear Technology, 720 Sycamore Drive, Milpitas,, CA 95035-7406

Distributors:
Arrow Electronics, 50 Marcus Drive, Melville, NY 11747-4210

Microsemi Analog Mixed Signal Group, 11861 Western Avenue, Garden Grove,, CA 92641-2119

Distributors:
Arrow Electronics, 50 Marcus Drive, Melville, NY 11747-4210
Avnet, 2211 S. 47th Street, Phoenix, AZ 85034
Falcon Electronics, 47 Mall Dr (# 5), Commack, NY 11725
Richardson Electronics, 40W267 Keslinger Road, LaFox, IL 60147
Universal Semiconductor, 2775 West Cypress Creek Drive, Fort Lauderdale, FL 33309
All American Semiconductor, 16115 Northwest 52nd Avenue, Miami, FL 33014

Microsemi SoC, Mountainview,, CA 94043-4655

Distributors:
Avnet, 2211 S. 47th Street, Phoenix, AZ 85034

Rochester Electronics, LLC, 10 Malcolm Hoyt Drive, Newburyport,, MA 01950

Distributors:
Avnet, 2211 S. 47th Street, Phoenix, AZ 85034

STMicroelectronics, 3 rue de suisse CS80816, 35208 Rennes Cedex 2, FR

Distributors:
Avnet, 2211 S. 47th Street, Phoenix, AZ 85034
Future Electronics, 237 Hymus Boulevard, Qubeck, Point Claire, Quebec H9R 5C7 Canada
Nu Horizons, 70 Maxess Road, Melville, NY 11747
Arrow Electronics, 50 Marcus Drive, Melville, NY 11747-4210

Texas Instruments, 6412 Highway 75 South, Sherman,, TX 75090

Distributors:
Arrow Electronics, 50 Marcus Drive, Melville, NY 11747-4210
Avnet, 2211 S. 47th Street, Phoenix, AZ 85034
Rochester Electronics, 10 Malcolm Hoyt Drive, Newburyport, MA 01950-4018

QML Manufacturer Military Distributors

This section contains a list of QML manufacturers' military distributors. This information was supplied by the QML manufacturers and is provided in QML-38535 as a service from DLA Land and Maritime-VQC. This listing is provided as a service only and is in no way intended to be an endorsement or restriction by the Government. For additional information or further update contact the applicable manufacturer in the QML Program Status section.

Texas Instruments SVA (formerly National Semiconductor), Santa Clara,, CA 95052-8090

Distributors:
Arrow Electronics, 50 Marcus Drive, Melville, NY 11747-4210
Avnet, 2211 S. 47th Street, Phoenix, AZ 85034
Future Electronics, 237 Hymus Boulevard, Qubeck, Point Claire, Quebec H9R 5C7 Canada

Vishay-Siliconix, 2201 Laurelwood Road, Santa Clara,, CA 95056-0951

Distributors:
Avnet, 2211 S. 47th Street, Phoenix, AZ 85034
Tri-Start Electronics, 979 Marconi Ave., Ronkonkoma, NY 11779
Spirit Electronics, 23910 N 19th Ave, Suite 26, Phoenix, AZ 85027
Newark Electronics, 4801 N. Ravenswood, Chicago, IL 60640
New Yorker Electronics, 209 Industrial Parkway, Northvale, NJ 07647
Mouser Electronics, 1000 North Main Street, Mansfield, TX 76063
Jaco Electronics, 145 Oser Avenue, Hauppauge, NY 11788-3721
Falcon Electronics, 47 Mall Dr (# 5), Commack, NY 11725
Arrow Electronics, 50 Marcus Drive, Melville, NY 11747-4210
Allied Electronics, 7410 Pebble Dr., Fort Worth, TX 76118
Future Electronics, 237 Hymus Boulevard, Qubeck, Point Claire, Quebec H9R 5C7 Canada

Xilinx Incorporated, 2100 Logic Drive, San Jose,, CA 95124-3450

Distributors:
Nu Horizons, 70 Maxess Road, Melville, NY 11747
Avnet, 2211 S. 47th Street, Phoenix, AZ 85034
Digi-Key, 701 Brooks Avenue South, Thief River Falls, MN 56701

Standardized Microcircuit Drawing (SMD) Approved Sources are available at the following web pages:
Qualification Part Search: http://www.landandmaritime.dla.mil/programs/psearch/
Standard Microcircuit Cross-Reference: http://www.landandmaritime.dla.mil/Programs/Smcr/
Qualified Products Database: http://qpldocs.dla.mil/search/parts.aspx?qpl=1118