



**DEFENSE LOGISTICS AGENCY**  
DEFENSE SUPPLY CENTER, COLUMBUS  
POST OFFICE BOX 3990  
COLUMBUS, OH 43218-3990

IN REPLY  
REFER TO

DSCC-VQ (VQC-10-019086 Mr. Tran/614-692-0606/dg)

October 26, 2009

SUBJECT: Laboratory Suitability for MIL-STD-883, FSC 5962

Microsemi Corporation  
Analog Mixed Signal Group  
Mr. James Howell  
Director of Quality and Reliability  
11861 Western Avenue  
Garden Grove, CA 92841-2119

Dear Mr. Howell:

Microsemi Corporation Analog Mixed Signal Group has demonstrated to the Defense Supply Center, Columbus (DSCC) compliance with MIL-STD-883, the test standard for integrated circuits. Microsemi Corporation Analog Mixed Signal Group is granted laboratory suitability for the facilities, test methods and conditions shown on the enclosure. All testing must be performed in accordance with MIL-PRF-38535 and MIL-STD-883 test methods.

This laboratory suitability is subject to the conditions in DoD 4120.24-M, Defense Standardization Program.

QPL/QML test labs shall notify the DSCC qualifying activity immediately after learning of a potential issuance of a GIDEP alert, problem advisory or major quality/reliability problem on their QPL/QML products utilizing test methods and conditions listed on the enclosure. Failure to provide prior notification may be grounds for removal from QML-38535.

This laboratory suitability is valid until terminated by written notice from the DSCC qualifying activity. If warranted, it may be withdrawn by DSCC qualifying activity at any time. Each of these facilities is subject to an audit by DSCC with a minimum notice.

Sincerely,

MICHAEL S. ADAMS  
Chief  
Custom Devices Team

Enclosure

cc:

VQC (Scott Thomas)

VQC (Michael Grammens)



Attachment to DSCC-VQ (VQC-10-019086)

Date: 26 Oct 09

<u>TEST</u>	<u>METHOD/CONDITION</u>			
Moisture Resistance	1004	Microsemi	N/A	N/A
Steady State Life Test	1005 A,B,C,D	Microsemi	PSI	
Stabilization Bake	1008 A,B,C,D,E,F,G,H	Microsemi	PSI	TEAM
Salt Atmosphere	1009 A		Hi-Reliability Microelectronics	
Temperature Cycling	1010 C	Microsemi	PSI	TEAM
Thermal Shock	1011 B	Microsemi		
Seal	1014 B,C <sub>1</sub>	Microsemi	PSI	TEAM (Krypton only <b>not</b> Helium)
Burn-in	1015 A,B,C,D,E	Microsemi	PSI	
Internal Water Vapor Content	1018	Pernicka		
Constant Acceleration	2001 E (y1 Orientation only) B (TO-3, Y package outline as specified by Detail Specification)	Microsemi	PSI	TEAM
Mechanical Shock	2002 B	Hi-Reliability Microelectronics		
Solderability	2003	Microsemi	PSI	TEAM
Lead Integrity	2004 B	Microsemi		
Vibration, Variable Frequency	2007 A	Hi-Reliability Microelectronics		
External Visual	2009	Microsemi	PSI	TEAM
Internal Visual	2010 B	Microsemi	PSI	TEAM
Bond Strength	2011 D	Microsemi	PSI	TEAM
Resistance to Solvents	2015	Microsemi	PSI	
Physical Dimensions	2016	Microsemi	PSI	
SEM	2018	Photometrics		
Die Shear Strength	2019	Microsemi	PSI	
PIND	2020 A,B	Microsemi	PSI	TEAM
Glassivation Layer	2021	Microsemi		

Lid Torque	2024	Microsemi		
Adhesion of Lead Finish	2025	Microsemi		
ESDS Classification	3015	Microsemi	N/A	N/A
Electrical Test	In accordance to MIL-STD-883 and as specified in the SMD	Microsemi	PSI	N/A
Failure Analysis		Microsemi		
SEM	TM 2018	Microsemi		
Wafer Lot Acceptance	TM 5007 (SGQ 1018B)	Microsemi		
Soldering Heat	TM 2036 (SGQ 1053L)	Microsemi		

**Subcontractors/Locations:**

- |    |                                 |                           |
|----|---------------------------------|---------------------------|
| 1. | Pernicka                        | Ft. Collins, CO, USA      |
| 2. | Team Pacific                    | Manila, Philippines       |
| 3. | Pacific Semiconductor Inc.      | Manila, Philippines       |
| 4. | Photometrics                    | Huntington Beach, CA, USA |
| 5. | Hi Reliability Microelectronics | Santa Clara, CA, USA      |