



**DEFENSE LOGISTICS AGENCY**  
DEFENSE SUPPLY CENTER, COLUMBUS  
POST OFFICE BOX 3990  
COLUMBUS, OH 43216-3990

IN REPLY  
REFER TO

DSCC-VQC-05-007332 (Mr. Tran/614-692-0606/mjg)

NOV 10 2004

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

Mr. Bill Bennett  
Manager of Quality and Reliability  
QP Semiconductor  
2945 Oakmead Village Court  
Santa Clara, CA 95051

Dear Mr. Bennett:

QP Semiconductor has demonstrated to the Defense Supply Center, Columbus (DSCC) compliance with MIL-STD-883, the test standard for integrated circuits. QP Semiconductor 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 letter supersedes DSCC-VQC-03-004392.

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

QPL/QML test labs shall notify the 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 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 DSCC. If warranted, it may be withdrawn by DSCC at any time.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:  
DSCC-VQC (Michael Grammens)  
DSCC-VQC (Scott Thomas)

Attachment to DSCC-VQ (VQC-05-007332)

<u>TEST</u>	<u>METHOD/CONDITION</u>			
Insulation Resistance	1003/None	QP Semi		
Moisture Resistance	1004	QP Semi		
Steady State Life Test	1005 A,B,C,D	QP Semi	Trio-Tech	Amkor Technology
		Liberty Labs		
Stabilization Bake	1008 A,B,C	QP Semi		
Salt Atmosphere	1009 A,B	QP Semi		
Temperature Cycling	1010 B, C	QP Semi	Millenium	
Thermal Shock	1011 B, C	QP Semi		
Seal	1014 C <sub>1</sub>	QP Semi		
Burn-in	1015 A,B,C,D	QP Semi	Trio-Tech	Amkor Technology
		Liberty Labs		
Internal Water Vapor Content	1018	Seal Labs	Atlantic Analytical	
Constant Acceleration	2001 A, B, D, E (Y <sub>1</sub> Orientation only)	QP Semi	Millenium	
Mechanical Shock	2002 A,B	QP Semi		
Solderability	2003 /None	QP Semi		
Lead Integrity	2004 B <sub>1</sub> , B <sub>2</sub> , D	QP Semi		
Vibration, Variable Frequency	2007 A	QP Semi		
External Visual	2009	QP Semi		
Internal Visual	2010 B	QP Semi		
Bond Strength	2011 C, D	QP Semi		
Internal Visual for DPA	2013	QP Semi		
Internal Visual & Mechanical	2014	QP Semi		
Resistance to Solvents	2015	QP Semi		
Physical Dimensions	2016	QP Semi		
SEM	2018	Analytical Solution, Inc.		
Die Shear Strength	2019	QP Semi		
Radiography	2012		NDT	

TEST	METHOD/CONDITION			
PIND	2020 A,B	QP Semi		
Glassivation Layer	2021	QP Semi	Analytical Solutions, Inc.	
Nondestructive Bond Pull	2023	QP Semi		
Lid Torque	2024	QP Semi		
Adhesion of Lead Finish	2025	QP Semi		
Substrate Attach Strength	2027	QP Semi		
ESDS Classification	3015	QP Semi		
Electrical Test	Per MIL-STD-883 paragraph 4.5	QP Semi		Amkor Technology
Solder Dip		Six Sigma		
Wafer Saw		Corwil Technology		
Marking		HGM		
Failure Analysis		Analytical Solution		
Wafer lot Acceptance	5007	Analytical Solution, Inc.		

**Subcontractors/locations:**

- |     |                            |                       |
|-----|----------------------------|-----------------------|
| 1.  | Trio-Tech                  | Bangkok, Thailand     |
| 2.  | Millenium                  | Bangkok, Thailand     |
| 3.  | Six Sigma                  | Milpitas, CA, USA     |
| 4.  | Analytical Solutions, Inc. | New Mexico, USA       |
| 5.  | Seal Labs                  | San Diego, CA, USA    |
| 6.  | Atlantic Analytical        | Whitehouse, NJ, USA   |
| 7.  | HGM                        | Santa Clara, CA, USA  |
| 8.  | Corwil Technology Corp.    | San Jose, CA, USA     |
| 9.  | Liberty Labs               | Milpitas, CA, USA     |
| 10. | Amkor Technology           | Witchita, Kansas, USA |
| 11. | NDT                        | Santa Clara, CA, USA  |