



DEFENSE LOGISTICS AGENCY
LAND AND MARITIME
POST OFFICE BOX 3990
COLUMBUS, OH 43218-3990

April 19, 2012

Mrs. Lisa Konigsberg
Director, MV-SV Corporate Quality
Actel DBA Microsemi SoC Products Group
2061 Stierlin Court
Mountain View, CA 94043-4655

Dear Mrs. Konigsberg:

Re: Laboratory Suitability for MIL-STD-883; FSC 5962; VQC-12-024081; Tran

Actel DBA Microsemi SoC Products Group has demonstrated to the DLA Land and Maritime compliance with MIL-STD-883, the test standard for integrated circuits. Actel DBA Microsemi SoC Products Group is granted laboratory suitability, effective March 08, 2012, 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.

This laboratory suitability is valid until terminated by written notice from DLA Land and Maritime. If warranted, it may be withdrawn by DLA Land and Maritime at any time. Each of these facilities is subject to an audit by DLA Land and Maritime with a minimum notice. The QML manufacturer shall be responsible to make all necessary arrangement with offshore facilities to grant DLA audit team access to these facilities to perform on site audit to the MIL-PRF-38535 and MIL-STD-883 requirements. Offshore facilities are subject to all of the conditions of MIL-PRF-38535 and MIL-STD-883.

Sincerely,

MICHAEL S. ADAMS
Chief
Custom Devices Branch

Enclosure

cc:



DLA Land and Maritime-VQC (Scott Thomas)

DLA Land and Maritime-VQ (Alberta Petruskevich)

Actel DBA Microsemi SoC Products Group – (Mr. Tejpal Sahota)

Enclosure to DLA Land and Maritime-VQ (VQC-12-024081)

Test Method / Para.	Description	Actel DBA Microsemi SoC	e2v DBA QP Semiconductor	RQE	Nano Integrated Solutions	Kyocera America, Inc.	Amkor Technology Muntinlupa, Philippines	Seal laboratories	Hirel Micro
1004	Moisture Resistance		X			X			X
1005	Steady State Life Test			A-E					
1008	Stabilization Bake								
1009	Salt Atmosphere		A			A			A
1010	Temperature Cycling		C			C	C		C
1011	Thermal Shock		B			B			B
1014	Seal		A ₁ A ₂ C ₁			A ₁ A ₂ C ₁	A ₁ A ₂ C ₁ C ₃		A ₁ A ₂ C ₁ C ₃
1015	Burn-in Test			A-E					
1018	Internal Water Vapor							X	
1019	Ionizing Radiation (Total Dose)								
1019	Ionizing Radiation (Low Dose)								
2001	Constant Acceleration		A-E			A-E	A-E		A-E
2002	Mechanical Shock		B						B
2003	Solderability		X			X	X		X
2004	Lead Integrity		B ₁ B ₂			B ₁ B ₂ D	B ₁ B ₂ D		B ₁ B ₂ D
2007	Vibration, Variable Frequency		A			A			A
2009	External Visual		X			X	X		X
2010	Internal Visual		A B			A B	A B		A B
2011	Bond Strength		D			D	D		D
2012	Radiography								
2013	Internal Visual Inspection for DPA		X			X			X
2014	Internal Visual and Mechanical		X			X	X		X
2015	Resistance to Solvents		X			X	X		X
2016	Physical Dimension		X			X	X		X
2018	SEM Inspection of Metallization			X					
2019	Die Shear Strength		X			X	X		X
2020	Particle Impact Noise Detection		A B			A B			A B
2021	Glassivation Layer Integrity		X	X		X			X
2023	Nondestructive Bond Pull						X		
2024	Lid Torque								
2025	Adhesion of Lead Finish		X			X			X
2027	Substrate Attach Strength					X	X		
2028	Pin Grid Package Destructive Lead Pull Test					X			X
2030	Ultrasonic Inspection of Die Attach								
3015	ESD Sensitivity Classification				X				
4.5.9	Electrical Test	X							
	Wafer probe, Parametric Test	X							

Test Method / Para.	Description	Six Sigma	Accurel Systems	Evan Analytical Group	Riga Analytical		NDT Labs	White Mountain Labs	Source Surveillance Services, Inc. (SSSI)
1004	Moisture Resistance								
1005	Steady State Life Test			X					
1008	Stabilization Bake								
1009	Salt Atmosphere								
1010	Temperature Cycling								
1011	Thermal Shock								
1014	Seal	A1 A2 C1							
1015	Burn-in Test			X					
1018	Internal Water Vapor								
1019	Ionizing Radiation (Total Dose)								
1019	Ionizing Radiation (Low Dose)								
2001	Constant Acceleration								
2002	Mechanical Shock								
2003	Solderability	X							
2004	Lead Integrity								
2007	Vibration, Variable Frequency								
2009	External Visual								
2010	Internal Visual								
2011	Bond Strength								
2012	Radiography						X		
2013	Internal Visual Inspection for DPA								
2014	Internal Visual and Mechanical								
2015	Resistance to Solvents								
2016	Physical Dimension								
2018	SEM Inspection of Metallization		X	X					
2019	Die Shear Strength								
2020	Particle Impact Noise Detection								
2021	Glassivation Layer Integrity			X					
2023	Nondestructive Bond Pull								
2024	Lid Torque								
2025	Adhesion of Lead Finish								
2027	Substrate Attach Strength								
2028	Pin Grid Package Destructive Lead Pull Test								
2030	Ultrasonic Inspection of Die Attach								
3015	ESD Sensitivity Classification							X	
4.5.9	Electrical Test								
	Column Attach	X							
	Failure Analysis		X	X	X	X			
	Pre-cap Inspection								X