



CERTIFICATE OF ACCREDITATION

ANSI-ASQ National Accreditation Board/AClass
500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

Evans Analytical Group, LLC
2710 Walsh Avenue
Santa Clara, CA 95051

has been assessed by AClass
and meets the requirements of international standard

ISO/IEC 17025:2005

while demonstrating technical competence in the field(s) of

TESTING

Refer to the accompanying Scope(s) of Accreditation for information regarding the types of tests to which this accreditation applies.

AT-1111

Certificate Number

A handwritten signature in black ink, appearing to read "Keith Greenaway", written over a horizontal line.

AClass Approval

Certificate Valid: 05/01/2011-05/01/2013
Version No. 002 Issued: 05/19/2011



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated January 2009*).



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

Evans Analytical Group, LLC.

2710 Walsh Avenue, Santa Clara, CA 95051
 Farid Ghafghaichi Phone: 408-454-4600

TESTING

Valid To: May 1, 2013

Certificate Number: AT-1111

I. Electrical and Environmental Stress

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	*DETECTION LIMIT/ RANGE/ EQUIPMENT
Voltage Stress	Integrated Circuits	Rise / Fall Time 2 ns – 10 ns Rise / Delay Time 130 ns – 170 ns Current 0.15 A – 5.86A	JEDEC JS-001-2010 JESD22-A114 Mil Std 883 TM 3015.7 AEC-Q100-002 Test – Human Body Model	768 and 2304 Pin Capacity 100 V to 8 kV ThermoKeyTek MK2, MK4
		Frequency - 11 MHz – 16 MHz Current 1.5 A – 16.1 A	JEDEC JESD22-A115 AEC-Q100-003 Test – Machine Model	768 and 2304 Pin Capacity 50 V to 2 kV ThermoKeyTek MK2, MK4
		I-Test V_{supply} Over-Voltage Test	JEDEC JESD78C AEC-Q100-004 Test –IC Latch-Up	768 and 2304 Pin Capacity 100 mA to 300 mA Temp 70°C-125°C ThermoKeyTek MK2, MK4
		Rise / Fall Time < 400 ps Peak Current Magnitude 2.25 A- 18A	JEDEC JESD22-C101 AEC-Q100-011 Test – Field Induced Charged Device Model	50 V to 2 kV ThermoKeyTek RCDM



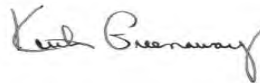
FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	*DETECTION LIMIT/ RANGE/ EQUIPMENT
Environmental Stress	Integrated Circuits	HTOL (High Temperature Operating Life)	Mil Std. 883TM 1005.8, 1006, 1015 MicroSemi Procedure 2-04-00007, 2-04-00063, 2-04-00065, 2-04-00066	85°C ~ 150°C 1-20 V/0-500 A
		HTSL (High Temperature Storage Life)	JESD22-A103	(100~185)°C
		THB (Temperature Humidity Bias)	JESD-A101	30°C ~ 85°C (60 ~ 95) %RH Non-Condensing
		PPOT – Pressure Pot	JESD22-A102	(121 – 135)°C, 20 PSI, 100% Saturation
		HAST (Highly Accelerated Stress Test)	JESD22-A110	(110 ~ 145)°C, 35 PSI, 100% Saturation @85% RH (Max) Trio-tech HAST-6000X
		TMCL – Temperature Cycling	JESD22-A104 Mil Std. 883 TM 1010 Mil Std. 750 TM 1051	Condition A-N (air to air) (-65 to 150)°C 10 min Dwell Instantaneous Ramp; 5 min Dwell 15 min Ramp
		Thermal Shock	Mil Std. 883 TM 1011.9	(-55 to 125)°C (Liquid to Liquid)
		Moisture Resistance	Mil Std. 883 TM 1004.7	-30°C to 105°C, 95% RH (Max)
		Preconditioning	JESD22-A113	Level 1 ~ 6
		Salt Atmosphere	Mil Std. 883 TM 1009.8	(20,000 to 50,000) mg / m ² per 24 hrs
Environmental Stress	LED and Solid State Lighting	HTOL (High Temperature Operating Life)	IES LM80-08 Stress	55°C-150°C EAG RI-06/07/08
		THB (Temperature Humidity Bias)		85°C-130°C/85%-95% RH EAG TH01-07
		TMCL – Temperature Cycling		-65°C to 0°C/20°C to 150°C EAG TC01, TC11, TC12



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Functional and DC Test Program	Integrated Circuits	Teradyne : uFlex iFlex J750 Catalyst ETS88 ETS364 Verigy: V93000 V83000 LTX/Credence: ASL 1000	Customer Specified by Device (via Test Traveler)	Computer Controlled Automatic Test Equipment and Associated Handling Equipment
		Wafer Probe: 150 mm 200 mm 300 mm -20°C to 80°C		
		Package Handling BGA, LBGA, TQFP, PLCC, DIP, SOIC, CSP		
		Package Test -40°C to 135°C		
		Digital Package Test 1 to 1280 Pins DC to 12 Gigabits RF		
		Mixed Signal Package Test 0 A to 40 A		

Notes:

1. * = As Applicable
2. This scope is part of and must be included with the Certificate of Accreditation No. AT-1111



Vice-President

