



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

EMC KASHIMA CORPORATION
1614 Mushihata, Katori-shi,
Chiba-ken, 289-0341, JAPAN
Masaru Kobayashi (Authorized Representative) Phone: 81-478 82 0963
Email: emctest@emc-kashima.co.jp
Web Page: <http://www.emc-kashima.co.jp/index.html>

ELECTRICAL (EMC)

Valid to: January 31, 2013

Certificate Number: 1266.01

In recognition of the successful completion of the A2LA and the evaluation process, accreditation is granted to this laboratory to perform the following automotive electromagnetic compatibility and other EMC/EMI tests:

<u>Test Technology</u>	<u>Test Method(s)</u>
Electrostatic Discharge	IEC/EN 61000-4-2
Radiated Immunity (up to 3 GHz)	IEC/EN 61000-4-3
Electrical Fast Transient/Burst	IEC/EN 61000-4-4
Surge Immunity	IEC/EN 61000-4-5
Conducted Immunity	IEC/EN 61000-4-6
Power Frequency Magnetic Field Immunity (up to 30 A/m)	IEC/EN 61000-4-8
Voltage Dips, Short Interruptions, and Line Voltage Variations	IEC/EN 61000-4-11
Current Harmonics	IEC/EN 61000-3-2
Voltage Fluctuations & Flicker	IEC/EN 61000-3-3

Test Technology	Test Method(s)
Conducted Emissions	CFR 47 FCC Part 15 using ANSI C63.4:2003, 2009 (for sites 1, 2, 5, 6 and 10 and site 4 for conducted emissions only); CFR 47 FCC Part 18 (using FCC/OST MP-5); CISPR 11; EN 55011; AS/NZS CISPR 11; CISPR 14-1; AS/NZS CISPR 14-1; CISPR 22; EN 55022; AS/NZS CISPR 22; ICES-003 Issue 4 (CAN/CSA-CISPR 22); VCCI V-3; EN 55014-1;EN 55016-2-1; J55014-1; J55022
Radiated Emissions	CFR 47 FCC Part 15 using ANSI C63.4:2003, 2009; CFR 47 FCC Part 18 (using FCC/OST MP-5); CISPR 11; EN 55011; AS/NZS CISPR 11; CISPR 14-1; AS/NZS CISPR 14-1; CISPR 22; EN 55022; AS/NZS CISPR 22; ICES-003 Issue 4 (CAN/CSA-CISPR 22); VCCI V-3 (up to 6 GHz); EN 55014-1; EN 55016-2-3; J55014-1; J55022
<i>Product Family Standards</i>	
Information Technology Equipment (Excluding key telephone systems)	CISPR 24; EN 55024
Medical Devices	EN 60601-1-2; IEC 60601-1-2; JIS T 0601-1-2
Measurement Control & Laboratory	IEC/EN 61326-1; JIS C 1806-1; IEC/EN 61326-2-1; IEC/EN 61326-2-2; IEC/EN 61326-2-3; IEC/EN 61326-2-6



Test Technology	Test Method(s)
<i>Product Family Standards(cont.)</i>	
Alarm Systems	EN 50130-4
Low Voltage Power Supplies	IEC/EN 61204-3
Household Appliances, Electrical Tools	CISPR 14-2; EN55014-2
Lifts, Escalators and Passenger Conveyors	EN 12015 (<i>Excluding harmonic distortion</i>); EN 12016
<i>Generic Standards - Immunity</i>	IEC/EN 61000-6-1; IEC/EN 61000-6-2
<i>Generic Standards - Emissions</i>	IEC/EN 61000-6-3; IEC/EN 61000-6-4
<i>Product Safety</i>	IEC/EN 60950-1 IEC/EN 61010-1
<i>Automotive Standards</i>	
Electrostatic Discharge (ESD)	SAE J1113-13: 2004; DC-11224 (2007) Sections 10.1 and 10.2; DC-10614 (2007) Sections 10.1 and 10.2; EMC-CS-2009 (CI 280); ISO 10605 (2001, 2008); GMW 3097 (2006) Section 3.6; CS 11979 (2009) Section 7.1 and 7.2; ES-XW7T-1A278-AC (CI 280)
Radiated Emissions	DC-10614 (2007) Section 6.5; DC-11224 (2007) Section 6.4; EMC-CS-2009 (RE 310); CISPR 25 (2002, 2008) Section 6.4; GMW 3097 (2006) Section 3.3.1; CS 11979 (2009) Section 5.3; ES-XW7T-1A278-AC (RE 310)



Test Technology	Test Method(s)
<i>Automotive Standards(cont.)</i>	
Conducted Emissions	DC-10614 (2007) Section 6.3, 6.4; DC-11224 (2007) Sections 6.2 and 6.3 ; EMC-CS-2009 (CE 420); CISPR 25 (2002, 2008) Sections 6.2 and 6.3; GMW 3097 (2006) Section 3.3.2; CS 11979 (2009) Sections 5.1 and 5.2; ES-XW7T-1A278-AC (CE 420)
Absorber-Lined Shielded Enclosure (ALSE) <i>(Using Nonmetallic Bench with metallic surface Ground Plane)</i> (200 MHz to 4 GHz, 200 V/m)	ISO 11452-2:2004; SAE J1113-21:1998; DC-10614 (2007) Section 7.4; DC-11224 (2007) Sections 7.2 and 7.3; EMC-CS-2009 (RI 114); ISO 11452-2 (2004); GMW 3097 (2006) Section 3.4.2; CS 11979(2009) Section 6.2; ES-XW7T-1A278-AC (RI 114)
Absorber-Lined Shielded Enclosure <i>Radar Pulse Only (ALSE)</i>	ISO 11452-2 (2004); GMW 3097 (2006) Section 3.4.2; CS 11979 (2009) Section 6.2; ES-XW7T-1A278-AC (RI 114) EMC-CS-2009 (RI 114)
Bulk Current Injection (BCI) <i>(Substitution method)</i>	DC-10614 (2007) Section 7.3; DC-11224 (2007) Section 7.2; EMC-CS-2009 (RI 112); ISO 11452-4 (2005); GMW 3097 (2006) Section 3.4.1; CS 11979 (2009) Section 6.1; ES-XW7T-1A278-AC (RI 112)
Bulk Current Injection (BCI) <i>(Closed-loop method)</i>	ISO 11452-4:2005; SAE J1113-4:2004
Immunity to Magnetic Fields	ISO 11452-8:2007; SAE J1113-22:1996
Conducted Transient	ISO 7637-2:1990, 2004 + A1:2008; ISO 7637-3:1995, 2007

On the following products or types of products: Automotive, Industrial, Scientific, and Medical (ISM) Equipment; Information Technology Equipment (ITE); Household Appliances; Electric Tools, Alarm Systems, Power Supplies





World Class Accreditation

The American Association for Laboratory Accreditation

Accredited Laboratory

A2LA has accredited

EMC KASHIMA CORPORATION

Chiba-ken, Japan

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General Requirements for the Competence of Testing and Calibration Laboratories*. 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 8 January 2009*).

Presented this 23rd day of March 2011.





Peter Abney

President & CEO
For the Accreditation Council
Certificate Number 1266.01
Valid to January 31, 2013
Revised December 22, 2011

For the tests or types of tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.