

Laboratory **EMC Test Services - Astra Microwave Products Limited, Plot No. 18-21, Imarath Kancha, Hardware Park, Raviryala Village, Maheshwaram Mandal, District Ranga Reddy, Telangana**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-6264 (in lieu of T-3588)**

Page 1 of 7

Validity **11.09.2017 to 10.09.2019**

Last Amended on 18.09.2017

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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ELECTRONICS TESTING

I.	EMC TEST FACILITY			
1.	Electrical / Electronic Equipment System / Subsystem	Conducted Emission, Power leads	MIL-STD-461C, 1986	30Hz to 50MHz Up to 195dBµA Product Current Limitation: 1Φ/3Φ: 25A DC: 70A
			MIL-STD-461D, 1993 MIL-STD-461E, 1999 MIL-STD-461F, 2007 MIL-STD-461G, 2015	30 Hz to 10 kHz Up to 195 dBµA Product Current Limitation: 1Φ/3Φ: 25A DC: 70A
			MIL-STD-461D, 1993 MIL-STD-461E, 1999 MIL-STD-461F, 2007 MIL-STD-461G, 2015	10kHz to 10MHz Up to 185 dBµV Product Current Limitation: 1Φ/3Φ: 25A DC: 70A
		Conducted Emission, Antenna Terminal	MIL-STD-461C, 1986	10kHz to 26GHz Up to 200 dBµV Product Current Limitation: 1Φ/3Φ: 25A DC: 70A

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Certificate Number TC-6264 (in lieu of T-3588)

Page 2 of 7

Validity 11.09.2017 to 10.09.2019

Last Amended on 18.09.2017

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		Conducted Emission, Antenna Terminal	MIL-STD-461D, 1993 MIL-STD-461E, 1999 MIL-STD-461F, 2007 MIL-STD-461G, 2015	10kHz to 40GHz Up to 200 dB μ V Product Current Limitation: 1 Φ /3 Φ : 25A DC: 70A
		Radiated Emission, Magnetic Field	MIL-STD-461C, 1986	30Hz to 50kHz Up to 195 dBpT Product Current Limitation: 1 Φ /3 Φ : 25A DC: 70A
			MIL-STD-461D, 1993 MIL-STD-461E, 1999 MIL-STD-461F, 2007 MIL-STD-461G, 2015	30Hz to 100kHz Up to 195 dBpT Product Current Limitation: 1 Φ /3 Φ : 25A DC: 70A
		Radiated Emission, Electric Field	MIL-STD-461C, 1986	14kHz to 10GHz Up to 160 dB μ V/m Product Current Limitation: 1 Φ /3 Φ : 25A DC: 70A
			MIL-STD-461D, 1993 MIL-STD-461E, 1999 MIL-STD-461F, 2007 MIL-STD-461G, 2015	10kHz to 18GHz Up to 160 dB μ V/m Product Current Limitation: 1 Φ /3 Φ : 25A DC: 70A

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Page 3 of 7

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		Radiated Emission, Antenna Spurious And Harmonic Outputs	MIL-STD-461C, 1986	10 kHz to 18GHz Up to 160 dBµV/m; fundamental freq. (f0) ≤ 7 GHz
		Radiated Emission, Antenna Spurious And Harmonic Outputs	MIL-STD-461D, 1993 MIL-STD-461E, 1999 MIL-STD-461F, 2007 MIL-STD-461G, 2015	10kHz to 18GHz Up to 160 dBµV/m fundamental freq. (f0) ≤ 7 GHz
		Conducted Susceptibility, Power Leads	MIL-STD-461C, 1986	30Hz to 50kHz Up to 140 dBµV
			MIL-STD-461D, 1993 MIL-STD-461E, 1999 MIL-STD-461F, 2007 MIL-STD-461G, 2015	30Hz to 150kHz Up to 140 dBµV
		Conducted Susceptibility, Intermodulation	MIL-STD-461C, 1986	15kHz to 10GHz Up to 10 dBm
			MIL-STD-461D, 1993 MIL-STD-461E, 1999 MIL-STD-461F, 2007 MIL-STD-461G, 2015	15kHz to 10GHz Up to 10 dBm
		Conducted Susceptibility, Rejection of Undesired Signal	MIL-STD-461C, 1986	30Hz to 20GHz Up to 10 dBm
			MIL-STD-461D, 1993 MIL-STD-461E, 1999 MIL-STD-461F, 2007 MIL-STD-461G, 2015	30Hz to 20GHz Up to 10 dBm
		Conducted Susceptibility, Antenna Port, Cross-Modulation	MIL-STD-461C, 1986	30Hz to 20GHz Up to 10 dBm

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Certificate Number **TC-6264 (in lieu of T-3588)**

Page 4 of 7

Validity **11.09.2017 to 10.09.2019**

Last Amended on 18.09.2017

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			MIL-STD-461D, 1993 MIL-STD-461E, 1999 MIL-STD-461F, 2007 MIL-STD-461G, 2015	30Hz to 20GHz Up to 10 dBm
		Conducted Susceptibility, Transients Power Leads	MIL-STD-461C, 1986	Up to 400V Peak Voltage, 5µS pulse width
		Conducted Susceptibility, Transients Power Leads	MIL-STD-461F, 2007	Up to 400V Peak Voltage, 5µS pulse width
		Conducted Susceptibility, Structure Current	MIL-STD-461C, 1986	60Hz to 100kHz Up to 120 dBµA
			MIL-STD-461D, 1993 MIL-STD-461E, 1999 MIL-STD-461F, 2007 MIL-STD-461G, 2015	60Hz to 100kHz Up to 120 dBµA
		Conducted Susceptibility, Bulk cable injection	MIL-STD-461D, 1993 MIL-STD-461E, 1999 MIL-STD-461F, 2007 MIL-STD-461G, 2015	10kHz to 400MHz Up to 110 dBµA
		Conducted Susceptibility, Impulse Excitation	MIL-STD-461D, 1993 MIL-STD-461E, 1999 MIL-STD-461F, 2007 MIL-STD-461G, 2015	5 A Peak
		Conducted Susceptibility, Damped Sinusoidal Transients	MIL-STD-461D, 1993 MIL-STD-461E, 1999 MIL-STD-461F, 2007 MIL-STD-461G, 2015	10kHz to 100MHz 0.1 A to 10 A Peak
		Radiated Susceptibility, Magnetic Field	MIL-STD-461C, 1986	30Hz to 50kHz Up to 183 dBpT
		Radiated Susceptibility, Magnetic Field	MIL-STD-461D, 1993 MIL-STD-461E, 1999 MIL-STD-461F, 2007 MIL-STD-461G, 2015	30Hz to 100kHz Up to 183 dBpT Product Current Limitation: 1Φ/3Φ: 25A DC: 70A

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Certificate Number **TC-6264 (in lieu of T-3588)**

Page 5 of 7

Validity **11.09.2017 to 10.09.2019**

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		Radiated Susceptibility, Electric Field	MIL-STD-461C, 1986 MIL-STD-461D, 1993	14kHz to 40GHz Up to 60 V/m Product Current Limitation: 1Φ/3Φ: 25A DC: 70A
		Radiated Susceptibility, Electric Field	MIL-STD-461E, 1999 MIL-STD-461F, 2007 MIL-STD-461G, 2015	2MHz to 40GHz Up to 60 V/m Product Current Limitation: 1Φ/3Φ: 25A DC: 70A
		Electrostatic Discharge Susceptibility	IEC 61000-4-2, 2008 IEC 801-2, 1984 MIL-STD-461G, 2015	+/- 30 kV
		Conducted Susceptibility, Power Leads	MIL-STD-461C, 1986	50kHz to 400MHz Up to 1Vrms Product Current Limitation: DC: 70A
		METHOD LDC102 Steady State Limits for Voltage Clause 5.3.2 METHOD LDC102 Steady State Limits for Voltage	MIL-STD-704D, 1980 MIL-STD-704E, 1991 MIL-STD-704F, 2004 MIL-HDBK-704-8, 2004	22V, 29VDC 30mins Product Current Limitation: DC: 20A
		METHOD LDC105 Normal Voltage Transients Clause 5.3.2 METHOD LDC105 Normal Voltage	MIL-STD-704D, 1980 MIL-STD-704E, 1991 MIL-STD-704F, 2004 MIL-HDBK-704-8, 2004	29V to 50V DC 22V to 50V DC Overvoltage transients 29V to 18V DC 22V to 18V DC undervoltage transients

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Page 6 of 7

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		Transients		29V-18V-50VDC 22V-18V-50VDC combined transients <1ms to 45ms Product Current Limitation: DC: 8.2A
		METHOD LDC201 Power Interrupt Clause 5.3.2 METHOD LDC201 Power Interrupt	MIL-STD-704D, 1980 MIL-STD-704E, 1991 MIL-STD-704F, 2004 MIL-HDBK-704-8, 2004	22V to 0V DC 28V to 0V DC 29V to 0V DC 10ms, 30ms, 50ms Product Current Limitation: DC: 8.2A
		METHOD LDC301 Steady State Limits for Voltage Clause 5.3.2 METHOD LDC301 Steady State Limits for Voltage	MIL-STD-704D, 1980 MIL-STD-704E, 1991 MIL-STD-704F, 2004 MIL-HDBK-704-8, 2004	20V, 31.5V DC 30mins Product Current Limitation: DC: 20A
		METHOD LDC302 Abnormal Voltage Transients Clause 5.3.2 METHOD LDC302 Abnormal Voltage Transients	MIL-STD-704D, 1980 MIL-STD-704E, 1991 MIL-STD-704F, 2004 MIL-HDBK-704-8, 2004	29V to 50V DC 22V to 50V DC Overvoltage transients 29V to 7V DC 22V to 7V DC undervoltage transients 29V-7V-50V-29VDC 22V-7V-50V-22VDC combined transients <1ms to 50ms Product Current Limitation: DC: 8.2A

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Certificate Number **TC-6264 (in lieu of T-3588)** **Page 7 of 7**

Validity **11.09.2017 to 10.09.2019** **Last Amended on 18.09.2017**

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		METHOD LDC401 Steady State Limits for Voltage Clause 5.3.2 METHOD LDC401 Steady State Limits for Voltage	MIL-STD-704D, 1980 MIL-STD-704E, 1991 MIL-STD-704F, 2004 MIL-HDBK-704-8, 2004	16V, 18V, 29VDC 30mins Product Current Limitation: DC: 20A
		METHOD LDC501 Starting Voltage Transients Clause 5.3.2 METHOD LDC501 Starting Voltage Transients	MIL-STD-704D, 1980 MIL-STD-704E, 1991 MIL-STD-704F, 2004 MIL-HDBK-704-8, 2004	29V to 12V <1ms to 30sec Product Current Limitation: DC: 8.2A
		METHOD LDC601 Power Failure Clause 5.3.2 METHOD LDC601 Power Failure	MIL-STD-704D, 1980 MIL-STD-704E, 1991 MIL-STD-704F, 2004 MIL-HDBK-704-8, 2004	28V to 0V 100ms to 7sec Product Current Limitation: DC: 8.2A
		METHOD LDC602 Phase Reversal	MIL-STD-704F, 2004 MIL-HDBK-704-8, 2004	28V DC 30mins Product Current Limitation: DC: 20A
		METHOD LDC103 Voltage Distortion Spectrum	MIL-STD-704D, 1980 MIL-STD-704E, 1991 MIL-STD-704F, 2004 MIL-HDBK-704-8, 2004	10Hz to 10kHz Up to 1 Vrms