



IECQ QUALITY ASSESSMENT SYSTEM (IECQ)

For rules and details of the IECQ visit www.iecq.org

IECQ Certificate of Approval Independent Testing Laboratory

IECQ Certificate No.:	IECQ-L ULTW 16.0003-03	Issue No.:	7	Status:	Current
Additional Site to Certification: IECQ-L ULTW 16.0003		Originally Issued: 2016/07/28			
Supersedes:	IECQ-L ULTW 16.0003-03 Issue 6	Issue Date:	2024/08/07	Site Added:	2016/07/28
CB Reference No.:	20003649 ITL	Expiration:	2025/07/27		

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The organization, facilities and procedures have been assessed by the IECQ Certification Body in accordance with IECQ 03-1 and IECQ 03-6 for issuance of this certificate and found to be in conformity with the applicable requirements of the IECQ Independent Testing Laboratory Assessment Program Requirements Scheme and in respect of ISO/IEC 17025:2017 for the testing of component product under the IECQ.

Scope:

The materials analysis, failure analysis, ESD tests and wire bonding of semiconductors.
See attached Schedule.

-- Attached Schedule: IECQ-L_ULTW_20003649 ITL. 08-07-24.pdf --

Approved by Certification Body (CB): DQS Group - DQS Taiwan Inc.

8F, 23, Yuan Huan West Road,
Feng Yuan Dist., Taichung City
Taiwan

Authorized person:
Bob CHEN



The validity of this certificate is maintained through on-going surveillance audits by the IECQ CB issuing this certificate.

This Certificate of Conformity may be suspended or withdrawn in accordance with the Rules of Procedure of the IECQ System and its Schemes.

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Schedule of Scope to Certificate of Approval

Independent Testing Laboratory

IECQ Certificate No.: IECQ-L ULTW 16.0003-03

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Schedule Number: IECQ-L ULTW 16.0003-03-S Rev No.: 7 Revision Date: 2024/08/07 Page 1 of 2

Appendix-1 (20003649 ITL)

Schedule of Scope to Certificate of Approval

Tests	Standards/Procedures
Transmission Electron Microscope - Electron Energy Loss Spectroscopy (TEM-EELS)	T-TEM-3
Energy Dispersive Spectrometry of X-ray (EDS)	T-SEM-3, T-TEM-3
Focused Ion Beam microscope (FIB)	T-FIB-3
Emission Microscopy (EMMI)	T-EFA-3
Emission Microscopy (EMMI)-InGaAs	T-EFA-3
Optical Beam Induced Resistance Change (OBIRCH)	T-EFA-3
Optical Microscope (OM)	T-OMI-3
3D Optical Microscope (3D OM)	T-LAB-3
IC Layout Imaging	T-OMI-3
Circuitry analysis	T-OMI-3
Thermal Emission Microscope (THEMOS)	T-EFA-3
Latch-up test	JESD78
Human Body Mode (HBM)	ANSI/ESDA/JEDEC JS-001, ANSI/ESD STM 5.1, JESD22-A114, MIL-STD-883, AEC-Q100-002
Machine Mode (MM)	ANSI/ESD S5.2, JESD22-A115, AEC-Q100-003

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DQS-Group - DQS Taiwan Inc., Feng Yuan Dist., Taichung City, Taiwan





IEC QUALITY ASSESSMENT SYSTEM (IECQ)
covering Electronic Components,
Assemblies, Related Materials and Processes
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Independent Testing Laboratory

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Charge Device Mode (CDM)	ANSI/ESD SP5.3.2, ANSI/ESD S5.3.1, JESD22-C101, ANSI/ESDA/JEDEC JS-002, AEC-Q100-011,
Electrostatic discharge immunity test	IEC 61000-4-2
Electrical Overstress (EOS)	IEC 61000-4-5
Transmission Line Pulse (TLP)	ANSI/ESD STM5.5.1, ANSI/ESD SP5.5.2
Wire Bonding	T-EFA-3
IC Package	T-EFA-3
Pull and shear test	MIL-STD-883 method 2011.9 MIL-STD-883 method 2023.7 AEC-Q100-001, EIA/JESD22-B116, JESD22-B117
Electro-migration test	IPC TM650 2.6.25
Conductive resistance test	IPC 9701

Technical Reviewer of DQS: Paul Yang Date: 8/7/2024

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