IEC 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 16.0003-04**	**Issue No.:**	**10**	**Status:**	**Current**

Additional Site to Certification: IECQ-L ULTW 16.0003 **Originally Issued: 2016/07/28**

Supersedes:	IECQ-L ULTW 16.0003-04 Issue 9	**Issue Date:**	2025/06/29	**Site Added:**	2016/07/28
CB Reference No.:	20003698 ITL	**Expiration:**	2028/07/27		

Materials Analysis Technology Inc.
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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 reliability testing of semiconductors in Component Level, Board Level, System Level.
See attached Schedule.

-- Attached Schedule: IECQ-L_ULTW_20003698 ITL. 06-29-25.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

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This Certificate of Conformity may be suspended or withdrawn in accordance with the Rules of Procedure of the IECQ System and its Schemes.
This certificate and any schedule(s) may only be reproduced in full.
This certificate is not transferable and remains the property of the issuing IECQ CB.
The Status and authenticity of this certificate may be verified by visiting www.iecq.org

-- Attached Translation: - None --

Schedule of Scope to Certificate of Approval

Independent Testing Laboratory

IECQ Certificate No.: IECQ-L ULTW 16.0003-04

CB Certificate No.: 20003698 ITL

Schedule Number: IECQ-L ULTW 16.0003-04-S **Rev No.:** 10 **Revision Date:** 2025/06/29 **Page** 1 **of** 3

Appendix-1 (20003698 ITL)
Schedule of Scope to Certificate of Approval

Description test	Standard
High Temperature Operation Life test (HTOL)	IEC 60068-2-1, JESD22-A108
Low Temperature Operation Life test (LTOL)	IEC 60068-2-1, JESD22-A108
Early Life Failure Rate (ELFR)	JESD22-A-108,AEC-Q100-008
Bias Life test (BLT)	JESD22-A108
Temperature Cycling test (TCT)	JESD22-A104
Temperature variation test (TCC)	IEC 60068-2-14/33
Thermal Shock test (TST)	JESD22-A106
High Temperature Storage test (HTST)	IEC 60068-2-2, JESD22-A103
Low Temperature Storage test (LTST)	IEC 60068-2-1, JESD22-A119
Pressure Cooker test (PCT/UB-HAST)	JESD22-A102, JESD22-A118
Highly Accelerated Stress test (HAST)	JESD22-A110
Temperature and Humidity Storage test (THST)	IEC 60068-2-3, JEDEC22 A101
Temperature and Humidity with Bias test (THB)	JESD22-A101
Pre-conditioning test	JESD22-A113
Reflow test	J-STD-020
Solderability test	J-STD-002

Schedule of Scope to Certificate of Approval

Independent Testing Laboratory

IECQ Certificate No.: IECQ-L ULTW 16.0003-04

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Schedule Number: IECQ-L ULTW 16.0003-04-S **Rev No.:** 10 **Revision Date:** 2025/06/29 **Page** 2 **of** 3

Description test	Standard
Steam aging test	J-STD-002
Surface Mount Technology (SMT)	IPC-A-610, IPC-A-600
Multi-function material test (Bending test)	JESD22-B113
Drop test	ISTA 2A, IEC 60068-2-32
Vibration test and Shock Test	IEC 60068-2-6/27/29/34/64
Salt atmosphere street test	JESD22-A107, IEC 60068-2-11/52
Gas corrosion test	IEC 60068-2-42/43/49/60
Electro-migration test	IPC TM650 2.6.25
Conductive resistance test	IPC 9701
Low temperature/ low humidity test	IEC 60068-2-38/39
Low pressure / altitude test	IEC 60068-2-13
Dust and water proof test	IEC 60529
Solar radiation test	IEC 60068-2-5/9
Tumbling Test	IEC 60068-2-31
Torque test	T-REL-3
Carton Compression test	ISTA 2A, ASTM
High Temperature Reverse Bias (HTRB)	MIL-STD-750 Method 1039
High Humidity High Temperature Reverse Bias (H3TRB)	JESD22-A-101
High Temperature Gate Bias (HTGB)	JESD22-A-108
Intermittent Operational Life (IOL)	MIL-STD-750 Method 1037, JESD22-A-122

Schedule of Scope to Certificate of Approval

Independent Testing Laboratory

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Description test	Standard
IP5KX(Arizona dust)	ISO 20653
Package Warpage Measurement	JESD22-B112
Lead Integrity	JESD22-B105
Die Strength	SEMI G86

Technical Reviewer of DQS: Paul Yang Date: 6/29/2025