DEFENSE LOGISTICS AGENCY



LAND AND MARITIME POST OFFICE BOX 3990 COLUMBUS, OH 43218-3990

August 20, 2021

Mark Wasilewski VP Quality onsemi 2300 Buckskin Road Pocatello, ID 83201-2734

Dear Mr. Wasilewski:

Re: Full Certification Class Q and N for MIL-PRF-38535; FSC 5962; VQC-21-035654; Yu. CN: 077528.

onsemi has demonstrated to the DLA Land and Maritime compliance with MIL-PRF-38535, the QML specification used by the Department of Defense (DoD) for integrated circuits that operate in severe environments.

This DLA Land and Maritime - VQC-21-035654 letter reflects the current certification status of onsemi as documented in the Quality Management Plan (QMP) #12MQM97077A, Rev. BY, dated 16 July 2019.

In addition, the parts that are manufactured using the certified technology flows are being listed on the QML-38535. This will allow onsemi to mark parts with "QML" or "Q". These designators have been authorized by the DoD for parts that have been produced to a QML specification (i.e., one which allows less government oversight), the use of world-wide commercial production lines, reduced finished product testing based on statistical process control (SPC), and other cost advantages.

Testing must be performed using the facilities and methods listed in the Laboratory Suitability letter VQC-21-035655 or at facilities approved by the onsemi Technical Review Board or BU-CAB using its MIL-PRF-38535 QML Processing Program.

This certification is subject to the conditions in DoD 4120.24-M, Defense Standardization Program and SD-6.

Any and all of the facilities mentioned on the enclosure are subject to an audit by the Qualifying Activity at any time. Offshore facilities are subject to the conditions of MIL-PRF-38535. The QML manufacturer is responsible to arrange for the qualifying activity to gain access to all applicable manufacturing facilities to preform site assessments to MIL-PRF-38535 requirements.

QPL/QML manufacturers shall notify the qualifying activity immediately after learning of a potential issuance of a GIDEP alert, problem advisory or major quality/reliability problem on their QPL/QML products. Failure to provide prior notification may be grounds for removal from QML-38535.

In addition, it is requested that the following activities be reported promptly to DLA Land and Maritime:

- 1. Changes to certified facilities, process flows, or approved testing subcontractors
- 2. Problem evaluation and a corrective action when:
 - a. A Technology Conformance Inspection (TCI) failure has been validated
 - b. The reliability of shipped parts is questionable.
- 3. Test optimization, including:
 - a. Implementation paragraph J.3.12, Appendix J, MIL-PRF-38535
 - b. Changing, suspending or canceling a prior test optimization
- 4. Additions or deletions of parts in the QML-38535
- 5. Change of company QML contact or other key QML personnel

This certification is valid until terminated by written notice from DLA Land and Maritime, and, if warranted, may be withdrawn at any time.

If you have any questions, please contact Mr. Shing Yu at (614) 692-0588.

Sincerely,

MICHAEL S. ADAMS Chief Custom Devices Branch

ENCLOSURE

Visit us on the web at: https://landandmaritimeapps.dla.mil/Offices/Sourcing and Qualification/default.aspx

OPERATION	FACILITY	LOCATION	TECHNOLOGY	LINE / FLOW #
Wafer Fab	onsemi Gresham	Gresham, OR	180 nm CMOS	12MID7019030
	onsemi Pocatello	Pocatello, ID	0.35, 0.5, 0.6, 0.8, 1.0, 1.25, 1.5um CMOS	12MID7019030
Design	onsemi Pocatello	Pocatello, ID	Custom ASICs	12MQE00004A
	onsemi Richardson	Richardson, TX	Custom ASICs	12MQE00004A
	onsemi Lindon	Lindon, UT	Custom ASICs	12MQE00004A
	onsemi Lower Gwynedd	Lower Gwynedd, PA	Custom ASICs	12MQE00004A
Mask Fab	Controlled by Wafer Fab	Gresham, OR Pocatello, ID	Custom ASICs	12MID7619107
Hermetic	Amkor/Anam (P1)	Manila, Philippines	Ceramic Packages	12MID7020040
Assembly			(Residual Inventory)	
	Amkor/Anam (P3)	Laguna, Philippines	Ceramic Packages (Residual Inventory)	12MID7020040
	Crtieria Labs	Austin, TX	Hot Solder Dip	12MID7050013
			Ceramic Packages	12MID7020040
	Integra Technologies Silicon Valley	Milpitas, CA	Ceramic Packages	12MID7050040
	Kyocera America, Inc.	San Diego, CA	DBGA Ceramic	12MID7020040
	Pantronix	Fremont, CA	Ceramic Packages (Residual Inventory)	12MID7020040
	Micross Components AIT	Research Triangle Park, NC	CCGA	CCGA-01
Plastic Assembly	Amkor/Anam (P1)	Manila, Philippines	LQFP	12MID7020037
	Amkor/Anam (P1)	Manila, Philippines	PLCC & PQFP (Residual Inventory)	12MID7020037
	Amkor/Anam (P3)	Laguna, Philippines	PBGA & chip carrier (Residual Inventory)	12MID7020062 12MID7020037
	Amkor (K4)	Gwangju, Korea	PBGA and FCBGA	12MID7020062
			(Residual Inventory)	12MID7020037
	Advanced Semiconductor Engineering, Inc.	Kaohsiung, Taiwan	PBGA, FCBGA, PQFP and LQFP	12MID7020037
Die Attach Materials	Crtieria Labs	Austin, TX	Eutectic and JM7000	12MID7050040
	Integra Technologies Silicon Valley	Milpitas, CA	Eutectic and JM7000	12MID7050040
	Kyocera America, Inc.	San Diego, CA	Eutectic and JM7000	12MID7050040
	Silicon Turnkey Solutions (Micross)	Milpitas, CA	JM7000	12MID7050040
Wire Type and Wire Size	Amkor/Anam	Manila, Philippines	Gold: 1 mil	12MID7050040
	Crtieria Labs	Austin, TX	Aluminum: 1.25 mil	12MID7050040
	Integra Technologies Silicon Valley	Milpitas, CA	Aluminum: 1.25 mil Gold: 1 mil	12MID7050040
	Kyocera America, Inc.	San Diego, CA	Aluminum: 1.25 mil Gold: 1 mil	12MID7050040
	Silicon Turnkey Solutions (Micross)	Milpitas, CA	Gold: 1 mil	12MID7050040

Lid Seal	Amkor/Anam	Manila, Philippines	Solder Furnace Seal	12MID7050040		
	Crtieria Labs	Austin, TX	Solder Furnace Seal	12MID7050040		
	Integra Technologies Silicon Valley	Milpitas, CA	Solder Furnace Seal	12MID7050040		
	Kyocera America, Inc.	San Diego, CA	Solder Furnace Seal	12MID7050040		
	Silicon Turnkey Solutions (Micross)	Milpitas, CA	Seam Seal	12MID7050040		
Lead Finish			Hot Solder, Gold Plate, Tin-Lead Plate, Gold Flash Palladium	12MID7050013 12MID7020037		
Electrical Test	Integra Technologies Wichita	Wichita, KS	Custom ASICs	12MID7050013 12MID7050026		
	onsemi Carmona	Carmona Cavite, Philippines	Custom ASICs	12MID7050013 12MID7050026		
	onsemi Pocatello	Pocatello, ID	Custom ASICs	12MID7050013 12MID7050026		
Test/Screen/TCI	See DLA Land and Maritime-VQC-21-035655 QML Laboratory Suitability letter					
Hermetic Package	Chip Carrier (pre-J up to 84 leaded)					
Technology	Chip Carrier (leadless up to 84 terminals)					
	Flat Pack (100-352 leads)					
	Side-braze (28-48 leads)					
	Pin Grid Array (69-181 pins)					
	DBGA (228-277 balls)					
	CLGA (564-624 pads)					
Plastic Package	CCGA (564-624 columns)					
Technology	Flat Pack (44-240 leads) Chip Carrier (28-84 leads)					
Technology	LFPBGA (84 balls max)					
	BGA (564 balls max)					
	SBGA (560 balls max)					