

Initial Product/Process Change Notification Document #:IPCN25549X

Issue Date:17 Oct 2023

Title of Change:	D2PAK Assembly and Test Qualification to Good-Ark		
Proposed First Ship date:	30 Sep 2024 or earlier if approved by customer		
Contact Information:	Contact your local onsemi Sales Office or Albert.Tanyag@onsemi.com		
PCN Samples Contact:	Contact your local onsemi Sales Office. Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.		
Type of Notification:	This is an Initial Product/Process Change Notification (IPCN) sent to customers. An IPCN is an advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan. The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN). This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 90 days prior to implementation of the change. In case of questions, contact < <u>PCN.Support@onsemi.com</u> >		
Marking of Parts/ Traceability of Change:	The affected products will be identified with date code		
Change Category:	Test Change, Assembly Change		
Change Sub-Category(s):	Manufacturing Site Add	Manufacturing Site Addition	
Sites Affected:			
onsemi Sites		External Foundry/Subcon Sites	
None		Good-Ark, China	

Description and Purpose:

Change Assembly site and FT site from onsemi Seremban to subcon Good-Ark.

	From	То
Assembly Site	onsemi Seremban, Malaysia	Good-Ark, Electronics Co.ltd., Suzhou, China
Die Attach	Pb95Sn5	Pb92.5Sn5Ag2.5
Mold Compound	Sumitomo G600	Sumitomo G700HF
Lead Frame Supplier	Kobe Malaysia SDI Taiwan	

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Qualification Plan:

QV DEVICE NAME: MC33167D2TR4G

RMS: S90473

PACKAGE: D2PAK 5LD

Test	Specification	Condition	Interval
High Temperature Operating Life	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
Temperature Cycling	JESD22-A104	Ta= -65°C to +150°C	500 cyc
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
Resistance to Solder Heat	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only	
Solderability	JSTD002	Ta = 245°C, 5 sec	
Physical Dimensions	JESD22-B120		<u> </u>

Estimated date for qualification completion: 30 June 2024

List of Affected Parts:

Note: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the PCN Customized Portal.

Part Number	Qualification Vehicle
LM2596DSADJG	MC33167D2TR4G
LM2595DSADJR4G	MC33167D2TR4G
LM2576D2TR4-012G	MC33167D2TR4G
LM2576D2TR4-5G	MC33167D2TR4G
LM2575D2T-3.3R4G	MC33167D2TR4G
LM2575D2T-5G	MC33167D2TR4G
LM2575D2T-5R4G	MC33167D2TR4G
LM2575D2T-12R4G	MC33167D2TR4G
LM2575D2T-15R4G	MC33167D2TR4G
LM2575D2T-ADJG	MC33167D2TR4G
LM2575D2T-ADJR4G	MC33167D2TR4G
LM2576D2T-005G	MC33167D2TR4G
LM2576D2T-15G	MC33167D2TR4G
LM2576D2T-ADJG	MC33167D2TR4G
LM2576D2T-ADJR4G	MC33167D2TR4G

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LM2576D2TR4-3.3G	MC33167D2TR4G
MC34167D2TR4G	MC33167D2TR4G
MC34167D2TG	MC33167D2TR4G
MC33167D2TR4G	MC33167D2TR4G
MC33167D2TG	MC33167D2TR4G
MC33166D2TR4G	MC33167D2TR4G
MC33166D2TG	MC33167D2TR4G
MC34166D2TR4G	MC33167D2TR4G
LM2596DSADJR4G	MC33167D2TR4G

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