

PCN Number:	20180925002.2A	PCN Date:	Nov 15, 2018												
Title:	Transfer of select SOIC devices from ALP to MLA for Assembly and Test														
Customer Contact:	PCN Manager	Dept:	Quality Services												
Proposed 1st Ship Date:	Apr 05, 2019	Estimated Sample Availability:	Date Provided at Sample request												
Change Type:															
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design												
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet												
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change												
<input type="checkbox"/>	Mechanical Specification	<input checked="" type="checkbox"/>	Test Site												
<input checked="" type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process												
		<input type="checkbox"/>	Wafer Bump Site												
		<input type="checkbox"/>	Wafer Bump Material												
		<input type="checkbox"/>	Wafer Bump Process												
		<input type="checkbox"/>	Wafer Fab Site												
		<input type="checkbox"/>	Wafer Fab Materials												
		<input type="checkbox"/>	Wafer Fab Process												
PCN Details															
Description of Change:															
Revision A is to add the affected customer device list under Page 2 of this PCN letter and announce the addition of UC1845AMDREPG4 device that was not included on the original PCN notification. This new device is highlighted and bolded in the device list below. The expected first shipment date for UC1845AMDREPG4 device will be 180 days from this notice (May 15, 2019) for this newly added device only. The proposed 1 st ship date of Apr 05, 2019 still applies for the original set of devices.															
This change notification is to announce the transfer of select SOIC devices listed in the "Product Affected" Section from ALP to MLA for Assembly and Test. Current assembly sites and Material differences are as follows.															
<table border="1"> <thead> <tr> <th>Assembly Site</th> <th>Assembly Site Origin</th> <th>Assembly Country Code</th> <th>Assembly Site City</th> </tr> </thead> <tbody> <tr> <td>Microchip Technology</td> <td>ALP</td> <td>THA</td> <td>Chachoengsao</td> </tr> <tr> <td>TI Malaysia</td> <td>MLA</td> <td>MYS</td> <td>Kuala Lumpur</td> </tr> </tbody> </table>				Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City	Microchip Technology	ALP	THA	Chachoengsao	TI Malaysia	MLA	MYS	Kuala Lumpur
Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City												
Microchip Technology	ALP	THA	Chachoengsao												
TI Malaysia	MLA	MYS	Kuala Lumpur												
Material Differences:															
	ALP	MLA													
Mount Compound	14M201001	4147858													
Mold compound	141002067	4211880													
Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ.															
Reason for Change:															
ALP shutting down 8pin SOIC production line by end Dec 2018															
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):															
None															
Anticipated impact on Material Declaration															
<input type="checkbox"/>	No Impact to the Material Declaration	<input checked="" type="checkbox"/>	Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained from the TI Eco-Info website . There is no impact to the material meeting current regulatory compliance requirements with this PCN change.												
Changes to product identification resulting from this PCN:															

Assembly Site		
Microchip Technology	Assembly Site Origin (22L)	ASO: ALP
TI Malaysia	Assembly Site Origin (22L)	ASO: MLA

Sample product shipping label (not actual product label)



TEXAS INSTRUMENTS
 MADE IN: Malaysia
 2DC: 2Q:
 MSL '2 /260C/1 YEAR SEAL DT
 MSL 1 /235C/UNLIM 03/29/04
 OPT:
 ITEM: 39
 LBL: 5A (L)T0:1750

(1P) SN74LS07NSR
 (Q) 2000 (D) 0336
 (31T) LOT: 3959047MLA
 (4W) TKY (1T) 7523483SI2
 (P)
 (2P) REV: (V) 0033317
 (20L) CS0: SHE (21L) CCO: USA
 (22L) ASO: MLA (23L) ACO: MYS

Product Affected:

UC1842AMDREP	UCC2800QDREP	V62/03624-07XE	UCC2805QDREP
UC1843AMDREP	V62/03624-01XE	UCC2801MDREP	V62/03624-08XE
UC1843AMDREPG4	V62/03624-02XE	UCC2801QDREP	V62/03624-09XE
UC1844AMDREP	V62/03624-03XE	UCC2802QDREP	V62/03625-01YE
UC1845AMDREP	V62/03624-04XE	UCC2803MDREP	V62/03625-02YE
UC1845AMDREPG4	V62/03624-05XE	UCC2803QDREP	V62/03625-03YE
UCC2800MDREP	V62/03624-06XE	UCC2804QDREP	V62/03625-04YE

Qualification Report
MMT Offload Qualification for SOIC Devices
 Approve Date 24-Sep-2018

Product Attributes

Attributes	Qual Device: <u>AM26C32MDREP</u>	Qual Device: <u>UC1843AMDREP</u>	Qual Device: <u>UCC2801MDREP</u>	QBS Package Reference: <u>PCM1801U</u>	QBS Package Reference: <u>SN65HVD1780DR</u>	QBS Package Reference: <u>TL598CDR</u>	QBS Package Reference: <u>TPS2419DR</u>
Assembly Site	FMX	MLA	MLA	MLA	MLA	FMX	FMX
Package Family	SOIC	SOIC	SOIC	SOIC	SOIC	SOIC	SOIC
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	SFAB	SFAB	SFAB	TSMC WF2	DMOS5	SFAB	MIHO
Wafer Fab Process	IMPC60-80	J1-PWR1	IMP-PWR1	0.6-DPDM	LBC5X	J11	LBC7

- QBS: Qual By Similarity
- Qual Devices AM26C32MDREP, UC1843AMDREP, UCC2801MDREP are qualified at LEVEL1-260CG

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	Test Name / Condition	Duration	Qual Device: <u>AM26C32MDREP</u>	Qual Device: <u>UC1843AMDREP</u>	Qual Device: <u>UCC2801MDREP</u>	QBS Package Reference: <u>PCM1801U</u>
AC	Autoclave 121C	96 Hours	1/77/0	1/77/0	1/77/0	3/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-
HTSL	High Temp Storage Bake 150C	1000 Hours	-	1/77/0	-	-
HTSL	High Temp Storage Bake 170C	420 Hours	1/77/0	-	1/77/0	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	1/77/0	1/77/0	1/77/0	3/231/0
VM	Visual / Mechanical	(per mfg. Site specification)	1/328/0	1/328/0	1/328/0	3/328/0
WBP	Bond Pull	Wires	1/76/0	1/76/0	1/76/0	3/76/0
WBS	Ball Bond Shear	Wires	1/76/0	1/76/0	1/76/0	3/76/0

Type	Test Name / Condition	Duration	QBS Package Reference: <u>SN65HVD1780DR</u>	QBS Package Reference: <u>TL598CDR</u>	QBS Package Reference: <u>TPS2419DR</u>
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	3/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	3/231/0
HTSL	High Temp Storage Bake 150C	1000 Hours	-	-	-
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	3/231/0
VM	Visual / Mechanical	(per mfg. Site specification)	3/328/0	3/328/0	3/328/0
WBP	Bond Pull	Wires	3/76/0	3/76/0	3/76/0
WBS	Ball Bond Shear	Wires	3/76/0	3/76/0	3/76/0

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable
 - The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours
 - The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours
 - The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles
- Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

THIS INFORMATION RELATING TO QUALITY AND RELIABILITY IS PROVIDED "AS IS." Product information detailed in this report may not accurately reflect TI's current product materials, processes and testing used in the construction of the TI products. Customers are solely responsible to conduct sufficient engineering and additional qualification testing to determine whether a device is suitable for use in their applications. Using TI products outside limits stated in TI's datasheet may void TI's warranty. See TI's Terms of Sale at "<http://www.ti.com/lscds/ti/legal/termsofsale.page>"

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or your local Field Sales Representative.

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