

<b>PCN Number:</b>	20181004002.1	<b>PCN Date:</b>	Oct 11, 2018
<b>Title:</b>	Transfer of select LFAST devices from GFAB to SFAB Wafer Fab site		
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	Jan 11, 2019	<b>Estimated Sample Availability:</b>	Date provided at sample request.
<b>Change Type:</b>			
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process
<input type="checkbox"/>	Design	<input type="checkbox"/>	Assembly Materials
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Electrical Specification
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Mechanical Specification
<input checked="" type="checkbox"/>	Wafer Fab Site	<input checked="" type="checkbox"/>	Packing/Shipping/Labeling
<input type="checkbox"/>		<input type="checkbox"/>	Test Process
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Bump Material
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Bump Process
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Wafer Fab Materials
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Wafer Fab Process
<input type="checkbox"/>		<input type="checkbox"/>	Part number change

**PCN Details**

**Description of Change:**

This change notification is to announce the transfer of select LFAST devices from GFAB to the SFAB (SH-BIP-1) Wafer Fab site for the selected devices listed in the "Product Affected" section.

Current Fab Site			New Fab Site		
Current Fab Site	Process	Wafer Diameter	New Fab Site	Process	Wafer Diameter
GFAB6	LFAST	150 mm	SH-BIP-1	LFAST	150 mm
GFAB8	LFAST	200 mm	SH-BIP-1	LFAST	150 mm

GFAB6 Die Metallization	GFAB8 Die Metallization	SH-BIP-1 Die Metallization
Al/1%Si	TiW/Al 0.5%Cu	TiW/Al 0.5%Cu

Qual details are provided in the Qual Data Section.

**Reason for Change:**

Greenock, Scotland (GFAB) Wafer Fab site closure.

**Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):**

None

**Changes to product identification resulting from this PCN:**


**Current:**

Current Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
GFAB6	GF6	GBR	Greenock
GFAB8	GF8	GBR	Greenock

**New Fab Site:**

New Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
SH-BIP-1	SHE	USA	Sherman

Sample product shipping label (not actual product label)



MADE IN: Malaysia  
2DC: 20

MSL 2 / 260C / 1 YEAR	SEAL DT
MSL 1 / 235C / UNLIM	03/29/04

OPT: 39  
ITEM: 39  
LBL: 5A (L)T0:1750



(1P) SN74LS07NSR  
(Q) 2000 (D) 0336  
(31T) LOT: 3959047MLA  
(4W) TKY (1T) 7523483S12  
(P)  
(2P) REV: (V) 0033317  
(20L) CSO: SHE (21L) CCO: USA  
(22L) ASO: MLA (23L) ACO: MYS

**Product Affected:**

5962-7802005M2A	LM4040CEM3-2.5/NOPB	LM4041DEM3X-1.2/NOPB	LM4120AIM5X-3.0/NOPB
5962-7802005MFA	LM4040CEM3-3.0/NOPB	LM4041DEM3X-ADJ/NOPB	LM4120AIM5X-3.3/NOPB
5962-7802302M2A	LM4040CEM3-5.0	LM4041DIM3-1.2	LM4120AIM5X-3.3/S5000511
5962-7802302MFA	LM4040CEM3-5.0/NOPB	LM4041DIM3-1.2/NOPB	LM4120AIM5X-4.1
5962-89615012A	LM4040CEM3X-3.0/NOPB	LM4041DIM3-ADJ	LM4120AIM5X-4.1/NOPB
5962-8961501PA	LM4040CEM3X-5.0/ELDB2169	LM4041DIM3-ADJ/NOPB	LM4120AIM5X-5.0/NOPB
5962-9076501M2A	LM4040CEM3X-5.0/NOPB	LM4041DIM3X-1.2/E7002631	LM4120IM5-1.8/NOPB
5962-9076501MEA	LM4040CIM3-10.0	LM4041DIM3X-1.2/NOPB	LM4120IM5-2.0/NOPB
5962-9076502M2A	LM4040CIM3-10.0/NOPB	LM4041DIM3X-ADJ	LM4120IM5-2.5/NOPB
5962-9076502MEA	LM4040CIM3-2.0	LM4041DIM3X-ADJ/NOPB	LM4120IM5-3.0
5962-9076502VEA	LM4040CIM3-2.0/NOPB	LM4041DIM7-1.2/NOPB	LM4120IM5-3.0/NOPB
5962-9076601M2A	LM4040CIM3-2.5	LM4041DIM7-ADJ/NOPB	LM4120IM5-3.3
5962-9076601VEA	LM4040CIM3-2.5/NOPB	LM4041DIM7X-1.2/NOPB	LM4120IM5-3.3/NOPB
5962-9076602M2A	LM4040CIM3-3.0	LM4041DIM7X-ADJ/NOPB	LM4120IM5-4.1/NOPB
5962-9076602MEA	LM4040CIM3-3.0/NOPB	LM4041DIZ-1.2/NOPB	LM4120IM5-5.0/NOPB
5962F7802302VFVA	LM4040CIM3-4.1	LM4041DIZ-ADJ/LFT1	LM4120IM5X-1.8/NOPB
5962F8961501VHA	LM4040CIM3-4.1/NOPB	LM4041DIZ-ADJ/NOPB	LM4120IM5X-2.0/NOPB
5962R7802005VEA	LM4040CIM3-5.0	LM4041EEM3-1.2	LM4120IM5X-2.5/NOPB
5962R7802005VFVA	LM4040CIM3-5.0/NOPB	LM4041EEM3-1.2/NOPB	LM4120IM5X-3.0/NOPB
CB0183MTAX/NOPB	LM4040CIM3-8.2	LM4041EEM3X-1.2/NOPB	LM4120IM5X-3.3/NOPB
DS16F95 MDA	LM4040CIM3-8.2/NOPB	LM4041EIM3-1.2	LM4120IM5X-4.1/NOPB
DS16F95 MDR	LM4040CIM3X-10/NOPB	LM4041EIM3-1.2/NOPB	LM4120IM5X-5.0/NOPB
DS16F95E/883	LM4040CIM3X-2.0/NOPB	LM4041EIM3X-1.2/NOPB	LM4121AIM5-1.2/NOPB
DS16F95J/883	LM4040CIM3X-2.5	LM4041EIM7-1.2/NOPB	LM4121AIM5-ADJ/NOPB
DS16F95W/883	LM4040CIM3X-2.5/NOPB	LM4041EIM7X-1.2/NOPB	LM4121AIM5X-ADJ/NOPB
DS16F95WFQMLV	LM4040CIM3X-3.0/NOPB	LM4050AEM3-10/NOPB	LM4121IM5-1.2/NOPB
DS26F31ME/883	LM4040CIM3X-4.1/NOPB	LM4050AEM3-2.0/NOPB	LM4121IM5-ADJ/NOPB
DS26F31MW/883	LM4040CIM3X-5.0	LM4050AEM3-2.5	LM4121IM5X-ADJ/NOPB
DS26F31MWFQMLV	LM4040CIM3X-5.0/NOPB	LM4050AEM3-2.5/NOPB	LM4125AIM5-2.5/NOPB
DS26F32 MW8	LM4040CIM7-2.0/NOPB	LM4050AEM3-5.0	LM4125IM5-2.0/NOPB
DS26F32ME/883	LM4040CIM7-2.5/NOPB	LM4050AEM3-5.0/NOPB	LM4140ACM-1.0/NOPB
DS26F32MJRQMLV	LM4040CIM7X-2.5/NOPB	LM4050AEM3-5.0/S7002735	LM4140ACM-1.2/NOPB
DS26F32MW/883	LM4040CIZ-10.0/NOPB	LM4050AEM3-8.2/NOPB	LM4140ACM-2.0/NOPB
DS26F32MWRQMLV	LM4040CIZ-2.5/LFT8	LM4050AEM3X-10/NOPB	LM4140ACM-2.5/NOPB
DS36954M/NOPB	LM4040CIZ-2.5/NOPB	LM4050AEM3X-2.5/NOPB	LM4140ACM-4.1/NOPB
DS36954MX/E7001014	LM4040CIZ-4.1/NOPB	LM4050AEM3X-5.0/NOPB	LM4140ACMX-2.5/NOPB
DS36954MX/NOPB	LM4040CIZ-5.0/NOPB	LM4050AIM3-10/NOPB	LM4140ACMX-4.1/NOPB
DS96F172ME/883	LM4040DEM3-2.0	LM4050AIM3-2.5	LM4140BCM-1.0/NOPB
DS96F172MJ/883	LM4040DEM3-2.0/NOPB	LM4050AIM3-2.5/NOPB	LM4140BCM-1.2/NOPB
DS96F173ME/883	LM4040DEM3-2.5/NOPB	LM4050AIM3-4.1	LM4140BCM-2.0/NOPB
DS96F173MJ/883	LM4040DEM3-2.5/S4000169	LM4050AIM3-4.1/NOPB	LM4140BCM-2.5/NOPB
DS96F173MJ/883/MABI	LM4040DEM3-3.0/NOPB	LM4050AIM3-5.0	LM4140BCM-4.1/NOPB
DS96F174ME/883	LM4040DEM3-5.0	LM4050AIM3-5.0/NOPB	LM4140BCM-1.0/NOPB
DS96F174MJ/883	LM4040DEM3-5.0/NOPB	LM4050AIM3X-2.5/NOPB	LM4140BCM-2.5/NOPB
DS96F174MJ-QMLV	LM4040DEM3X-2.5/NOPB	LM4050AIM3X-4.1/NOPB	LM4140BCM-4.1/NOPB

DS96F175ME/883	LM4040DEM3X-5.0/NOPB	LM4050AIM3X-5.0/NOPB	LM4140CCM-1.0/NOPB
DS96F175ME/883/MABI	LM4040DIM3-10.0	LM4050BEM3-10/NOPB	LM4140CCM-1.2/NOPB
DS96F175MJ-QMLV	LM4040DIM3-10.0/NOPB	LM4050BEM3-2.5	LM4140CCM-2.0/NOPB
LDC577BIM3/NOPB	LM4040DIM3-2.0/NOPB	LM4050BEM3-2.5/NOPB	LM4140CCM-2.5/NOPB
LDC577BIM3E/NOPB	LM4040DIM3-2.5	LM4050BEM3-4.1/NOPB	LM4140CCM-4.1/NOPB
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LM3411AM5X-5.0/NOPB	LM4040DIM3-4.1/NOPB	LM4050BEM3X-10/NOPB	LM4140CCMX-4.1/NOPB
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LM3411M5-5.0/NOPB	LM4040DIM3-5.0/NOPB	LM4050BEM3X-5.0/NOPB	LM4431M3-2.5/NOPB
LM3411M5X-3.3/NOPB	LM4040DIM3-8.2/NOPB	LM4050BIM3-2.5	LM4431M3X-2.5/NOPB
LM3411M5X-5.0/NOPB	LM4040DIM3X-10/NOPB	LM4050BIM3-2.5/NOPB	LM45BIM3
LM3420AM5-8.4/NOPB	LM4040DIM3X-2.0/NOPB	LM4050BIM3-4.1/NOPB	LM45BIM3/NOPB
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LM4040AIM3-2.0	LM4040DIM3X-4.1/NOPB	LM4050BIM3X-2.5/NOPB	LM45CIM3X/NOPB
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LM4040BIM3-10.0	LM4041AIM3-1.2/NOPB	LM4051AIM3-1.2	LM56CIMX/NOPB
LM4040BIM3-10.0/NOPB	LM4041AIM3X-1.2/NOPB	LM4051AIM3-1.2/NOPB	LM60BIM3
LM4040BIM3-2.0/NOPB	LM4041AIZ-1.2/NOPB	LM4051AIM3-ADJ	LM60BIM3/NOPB
LM4040BIM3-2.5	LM4041BIM3-1.2	LM4051AIM3-ADJ/NOPB	LM60BIM3X
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LM4040BIM3-3.0	LM4041BIM3X-1.2/NOPB	LM4051AIM3X-ADJ/NOPB	LM60BIZ/LFT3
LM4040BIM3-3.0/NOPB	LM4041BIM7-1.2	LM4051BEM3-1.2	LM60BIZ/NOPB
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LM4040BIM3-4.1/NOPB	LM4041BIM7X-1.2/NOPB	LM4051BIM3-1.2/NOPB	LM60CIM3/NOPB
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LM4040BIM3-8.2	LM4041CEM3-1.2/NOPB	LM4051BIM3X-ADJ/NOPB	LM60CIZ/NOPB
LM4040BIM3-8.2/NOPB	LM4041CEM3-ADJ	LM4051CIM3-1.2	LM61BIM3
LM4040BIM3X-10/NOPB	LM4041CEM3-ADJ/NOPB	LM4051CIM3-1.2/NOPB	LM61BIM3/NOPB
LM4040BIM3X-2.0/NOPB	LM4041CEM3X-1.2/NOPB	LM4051CIM3-ADJ/NOPB	LM61BIM3X/NOPB
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LM4040BIM3X-2.5/NOPB	LM4041CEM3X-ADJ/NOPB	LM4051CIM3X-ADJ/NOPB	LM61BIZ/NOPB
LM4040BIM3X-3.0/NOPB	LM4041CIM3-1.2	LM4120AIM5-1.8/NOPB	LM61CIM3
LM4040BIM3X-4.1	LM4041CIM3-1.2/NOPB	LM4120AIM5-2.0/NOPB	LM61CIM3/NOPB
LM4040BIM3X-4.1/NOPB	LM4041CIM3-ADJ	LM4120AIM5-2.5	LM61CIM3X/NOPB
LM4040BIM3X-5.0/NOPB	LM4041CIM3-ADJ/NOPB	LM4120AIM5-2.5/NOPB	LM61CIZ/J7000550
LM4040BIM7-2.0/NOPB	LM4041CIM3X-1.2/NOPB	LM4120AIM5-3.0	LM61CIZ/LFT2
LM4040BIM7-2.5	LM4041CIM3X-ADJ/NOPB	LM4120AIM5-3.0/NOPB	LM61CIZ/NOPB
LM4040BIM7-2.5/NOPB	LM4041CIM7-1.2/NOPB	LM4120AIM5-3.3	LM62BIM3/NOPB
LM4040BIM7-5.0/NOPB	LM4041CIM7-ADJ/NOPB	LM4120AIM5-3.3/NOPB	LM62BIM3X/NOPB
LM4040BIM7X-2.5/NOPB	LM4041CIM7X-1.2/NOPB	LM4120AIM5-4.1/NOPB	LM62CIM3/NOPB
LM4040BIZ-10.0/NOPB	LM4041CIM7X-ADJ/NOPB	LM4120AIM5-5.0	LM62CIM3X/NOPB
LM4040BIZ-2.5/NOPB	LM4041CIZ-1.2/NOPB	LM4120AIM5-5.0/NOPB	LMT90DBZR
LM4040BIZ-4.1/NOPB	LM4041CIZ-ADJ/NOPB	LM4120AIM5X-1.8/NOPB	LMT90DBZT
LM4040BIZ-5.0/NOPB	LM4041DEM3-1.2/NOPB	LM4120AIM5X-2.0/NOPB	RM16F95WFQMLV
LM4040CEM3-2.5	LM4041DEM3-ADJ	LM4120AIM5X-2.5/NOPB	RM26F31MWFQMLV
LM4040CEM3-2.5/E7001881	LM4041DEM3-ADJ/NOPB	LM4120AIM5X-2.5/S2000162	RM26F32MWRQMLV

## Qualification Report

### SFAB Process qualification LFAST - SLFMC404012BZS- LM4041QCEM3-1.2NO

Approve Date 2-Oct-2018

Product Attributes

Attributes	Qual Device: LM4041QCEM3-1.2NO
Wafer Fab Supplier	SFAB
Wafer Process	LFAST
Assembly Site	TIEM
Package Type	SOT-23
Package Designator	DBZ

- Qual Devices qualified at LEVEL1-260CG: LM4041QCEM3-1.2NO

### Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: LM4041QCEM3-1.2NO
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0
AC	Autoclave 121C	96 Hours	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	3/231/0
HTOL	Life Test, 125C	1000 Hours	3/231/0
ELFR	Early Life Failure Rate, 150C	24 Hours	3/2400/0
EM	Electromigration	--	Completed Per Process Technology Requirements
TDDB	Time Dependant Dielectric Breakdown	--	Completed Per Process Technology Requirements
HCI	Hot Injection Carrier	--	Completed Per Process Technology Requirements
NBTI	Negative Bias Temperature Instability	--	Completed Per Process Technology Requirements
SM	Stress Migration	--	Completed Per Process Technology Requirements
HBM	ESD - HBM	2500 V	3/9/0
CDM	ESD - CDM	1500 V	3/9/0
LU	Latch-up	(per JESD78)	2/12/0
ED	Electrical Distributions	Cpk>1.67 Room, Hot, & Cold Test	3/90/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass
MQ	Manufacturability (Wafer Fab)	(per mfg. Site specification)	Pass

- 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

## Qualification Report

### SFAB Process qualification LFAST - SLFMC60AZS- LM60QIM3X/NOPB

Approve Date 26-Sept-2018

#### Product Attributes

Attributes	Qual Device: LM60QIM3X/NOPB	QBS Device: LM4041QCEM3-1.2NO
Wafer Fab Supplier	SFAB	SFAB
Wafer Process	LFAST	LFAST
Assembly Site	TIEM	TIEM
Package Type	SOT-23	SOT-23
Package Designator	DBZ	DBZ

- Qual Devices qualified at LEVEL 1-260CG: LM60QIM3X/NOPB

#### Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: LM60QIM3X/NOPB	QBS Device: LM4041QCEM3-1.2NO
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0	3/231/0
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	3/231/0	3/231/0
HTOL	Life Test, 125C	1000 Hours	3/231/0	3/231/0
ELFR	Early Life Failure Rate, 150C	24 Hours	-	3/2400/0
HBM	ESD - HBM	2500 V	3/9/0	3/9/0
CDM	ESD - CDM	1500 V	3/9/0	3/9/0
LU	Latch-up	(per JESD78)	3/18/0	-
ED	Electrical Distributions	Cpk>1.67 Room, Hot, & Cold Test	3/90/0	3/90/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass
MQ	Manufacturability (Wafer Fab)	(per mfg. Site specification)	Pass	Pass

- 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

## Qualification Report

**SFAB Process qualification LFAST-CCR - SLFMC405050CZS- LM4050QAEM3-5.0/NO**  
**Approve Date 26-Sept-2018**  
**Product Attributes**

Attributes	Qual Device LM4050QAEM3-5.0/NO	QBS Device: LM4041QCEM3-1.2NO
Wafer Fab Supplier	SFAB	SFAB
Wafer Fab Process	LFAST-CCR	LFAST-CCR
Assembly Site	TIEM	TIEM
Package Type	SOT-23	SOT-23
Package Designator	DBZ	DBZ

- Qual Devices qualified at LEVEL1-260CG: LM4050QAEM3-5.0/NO

### Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: LM4050QAEM3-5.0/NO	QBS Device: LM4041QCEM3-1.2NO
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0	3/231/0
AC	Autoclave 121C	96 Hours	-	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	3/231/0
HTOL	Life Test, 125C	1000 Hours	3/231/0	3/231/0
ELFR	Early Life Failure Rate, 150C	24 Hours	-	3/2400/0
HBM	ESD - HBM	2500 V	1/3/0	3/9/0
CDM	ESD - CDM	1500 V	1/3/0	3/9/0
LU	Latch-up	(per JESD78)	1/6/0	3/18/0
ED	Electrical Distributions	Cpk>1.67 Room, Hot, & Cold Test	3/90/0	3/90/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass
MQ	Manufacturability (Wafer Fab)	(per mfg. Site specification)	Pass	Pass

- 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

**Qualification Report**  
**SFAB Process Qualification LFAST - SLFDSC36954AIS - DS36954VX/NOPB**  
**Approve Date 26-Sept-2018**

**Product Attributes**

Attributes	Qual Device: DS36954VX/NOPB	Package QBS Device: TP3070V-G
Wafer Fab Supplier	SFAB	GFAB
Wafer Process	LFAST	CS150
Assembly Site	AP1	AP1
Package Type	PLCC	PLCC
Package Designator	FN	FN

- Qual Devices qualified at LEVEL2-260CG: DS36954VX/NOPB

**Qualification Results**

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

Type	Test Name / Condition	Duration	Qual Device: DS36954VX/NOPB	QBS Device: TP3070V-G
THB	Biased Temp Humidity 85C/85%RH	1000 Hours	-	3/231/0
AC	Autoclave 121C	96 Hours	-	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	3/231/0	-
HTOL	Life Test, 125C	1000 Hours	3/231/0	-
HBM	ESD - HBM	2500 V	3/9/0	-
CDM	ESD - CDM	1000 V	3/9/0	-
LU	Latch-up	(Per AEC Q100-004)	3/18/0	-
ED	Electrical Distributions	Cpk>1.67 Room, Hot, & Cold Test	3/90/0	-
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	-
MQ	Manufacturability (Fab)	(per mfg. Site specification)	Pass	-

- 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

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

Location	E-Mail
USA	<a href="mailto:PCNAmericasContact@list.ti.com">PCNAmericasContact@list.ti.com</a>
Europe	<a href="mailto:PCNEuropeContact@list.ti.com">PCNEuropeContact@list.ti.com</a>
Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
Japan	<a href="mailto:PCNJapanContact@list.ti.com">PCNJapanContact@list.ti.com</a>