

PCN Number:	20160629002	PCN Date:	7/25/2016
Title:	Qualification of MAINEFAB for select ABCD150 devices		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	1/25/2017	Estimated Sample Availability:	Date provided at sample request.
Change Type:			
<input type="checkbox"/> Assembly Site	<input type="checkbox"/> Assembly Process	<input type="checkbox"/> Assembly Materials	
<input type="checkbox"/> Design	<input type="checkbox"/> Electrical Specification	<input type="checkbox"/> Mechanical Specification	
<input type="checkbox"/> Test Site	<input 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 checked="" type="checkbox"/> Wafer Fab Site	<input checked="" type="checkbox"/> Wafer Fab Materials	<input type="checkbox"/> Wafer Fab Process	
	<input type="checkbox"/> Part number change		

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of its MAINEFAB fabrication facility as a wafer Fab source for the devices listed in "Product Affected" section of this document.

Current			New		
Chip Sites	Process	Wafer Diameter	Chip Site	Process	Wafer Diameter
GFAB6	ABCD150	150mm	MAINEFAB	ABCD150	200mm
GFAB8	ABCD150	200mm	MAINEFAB	ABCD150	200mm

Qual details are provided in the Qual Data Section.

Reason for Change:

Continuity of Supply

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

None

Changes to product identification resulting from this PCN:

Current

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

New

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
MAINEFAB	CUA	USA	South Portland

Sample product shipping label (not actual product label)

 **TEXAS INSTRUMENTS**

MADE IN: Malaysia
2DC: 20:

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

OPT:
ITEM:

LBL: 5A (L)T0:1750



(1P) SN74LS07NSR
(Q) 2000 (D) 0336
(31T) LOT: 3959047MLA
(4W) TKY (1T) 7523483S12
(P)
(2P) REV: (V) 0033317
(20L) CS0: SHE (21L) CCO:USA
(22L) ASD: MLA (23L) ACO: MYS

Product Affected:

LM25088QMH-1/NOPB	LM26003AQPWPT	LM3478QMMX/E7002548	LM5088QMH-1/NOPB
LM25088QMH-2/NOPB	LM2743Q1MTCX/S7002689	LM3478QMMX/E7002663	LM5088QMH-2/NOPB
LM25088QMHX-1/NOPB	LM3102QMH/NOPB	LM3478QMMX/S7002552	LM5088QMHX-1/NOPB
LM25088QMHX-2/NOPB	LM3102QMHX/NOPB	LM5001IDQ1	LM5088QMHX-2/NOPB
LM25118Q1MH/NOPB	LM3406HVQMHQ1	LM5001IDRQ1	SN386901NGGRQ1
LM25118Q1MHE/NOPB	LM3406HVQMHXQ1	LM5021-1QDGKRQ1	SN386918NGGRQ1
LM25118Q1MHX/NOPB	LM3476QMM/NOPB	LM5022QDGSRQ1	TPS92690Q1PWP/NOPB
LM26001QMXAX/J7002755	LM3476QMMX/NOPB	LM5022QDGSTQ1	TPS92690Q1PWPR/NOPB
LM26003AQPWPR			

**Automotive Qualification Report
(As per AEC-Q100 and JEDEC Guidelines)
ABCD150 Fab Process Qualification in Maine Fab
Approve Date: 7-December-2010**

Product Attributes

Attributes	Qual Device: LP38691QSD-ADJ/NOPB	QBS Device #1: LP3907QSQ-JXIP/NOPB	QBS Device #2: LMH6722QSD/NOPB	QBS Device #3: DS25CP102QSQ/NOPB	QBS Device #4: DS99R421QSQ/NOPB
Automotive Grade Level:	1	1	1	3	2
Operating Temp Range:	-40°C to +125°C	-40°C to +125°C	-40°C to +125°C	-40°C to +85°C	-40°C to +105°C
Product Function:	LDO Regulator	PMIC Voltage Regulator	Op Amp	LVDS crosspoint switch	FPD Link
Die Attributes					
Wafer Fab Supplier:	Maine Fab	Maine Fab	Maine Fab	Maine Fab	Maine Fab
Wafer Diameter (mm):	200mm	200mm	200mm	200mm	200mm
Wafer Process Technology:	ABCD150	ABCD150	ABCD150	ABCD150	ABCD150
Wafer Process ID:	POWER BICMOS	CMOS7 5V	HIGH SPEED BIP	BICMOS8B+	CMOS7
Die Size (X,Y):	69 x 48 mils	99.6 x 99.6 mils	73.3 x 47.4 mils	72.24 x 71.46 mils	111.063 x 111.063 mils
Die Revision:	A	A	A	A	A
Package Attributes					
Assembly Site:	TIEMA	TIEMA	TIEMA	TIEMA	TIEMA
Package Type:	WSON	WQFN	WSON	WQFN	WQFN
Package Designator:	NGG	RTW	NHK	RGH	NJK
Lead Count:	6	24	14	16	36
Package Dimensions (mils):	118.1 x 118.1 mils	157.5 x 157.5 mils	118.1 x 157.5 mils	157.5 x 157.5 mils	236.2 x 236.2 mils
Body Thickness (mils):	31.5	31.5	31.5	31.5	31.5
Ball/Lead Pitch (mils):	37.4	19.7	19.7	19.7	19.7
Flammability Rating:	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wire Bond Material:	Au	Au	Au	Au	Au
Wire Bond Diameter (mils):	1.3	1.3	1.0	1.0	1.0
Lead Frame Material:	Cu	Cu	Cu	Cu	Cu
Lead Frame Plating Composition:	Matte Sn	Matte Sn	Matte Sn	Matte Sn	Matte Sn

- QBS: Qual by Similarity
- MSL Level 1 @260

Qualification Results

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

Test/Methods	Conditions	Measurement	ATE	Qual Device: LP38691QSD- ADJ/NOPB	QBS Device #1: LP3907QSQ- JXIP/NOPB	QBS Device #2: LMH6722QSD/NOPB	QBS Device #3: DS25CP102QSQ/NOPB	QBS Device #4: DS99R421QSQ/NOPB	
ELFR JESD22-A108	125°C	48hrs	25°C	3/2397/0	-	-	-	-	
			125°C	3/2397/0	-	-	-	-	
THBT JESD22-A101	85°C, 85%, 33.3psia	1000hrs	25°C	-	1/77/0	2/154/0	2/154/0	1/77/0	
			85°C	-	-	-	2/154/0	-	
			105°C	-	-	-	-	1/77/0	-
			125°C	-	1/77/0	2/154/0	-	-	
OPL JESD22-A108	125°C	1000hrs	25°C	3/231/0	-	-	-	-	
			150°C	3/231/0	-	-	-	-	
			-40°C	3/231/0	-	-	-	-	
HTSL JESD22-A103	150°C	1000hrs	25°C	-	1/45/0	1/90/0	1/77/0	1/77/0	
			85°C	-	-	-	1/77/0	-	
			105°C	-	-	-	-	1/77/0	-
			125°C	-	1/45/0	1/90/0	-	-	
TMCL JESD22-A104	-65°C to 150°C	500cyc	25°C	-	1/77/0*	-	2/154/0*	1/77/0*	
			85°C	-	-	-	2/154/0*	-	
			105°C	-	-	-	-	1/77/0*	-
			125°C	-	1/77/0*	-	-	-	
ACLV JESD22-A102	121°C, 100%, 14.7PSI	96hrs	25°C	-	-	3/231/0	1/77/0	1/77/0	
ESDH	1.5 kOhms, 100pF, Room Temp	2000V	25°C	1/3/0	-	-	-	-	
			125°C	1/3/0	-	-	-	-	
ESDM	0 Ohm, 200pF, Room Temp	200V	25°C	1/3/0	-	-	-	-	
			125°C	1/3/0	-	-	-	-	
ESDC	Peak current pulse based on package parasitic impedance	750V	25°C	1/3/0	-	-	-	-	
			125°C	1/3/0	-	-	-	-	
LUPS	Current and Over Voltage test at Max Ambient Operating Temp	25°C	25°C	1/6/0	-	-	-	-	
		125°C	150°C	1/6/0	-	-	-	-	
GTLK	155°C	+/-400V	25°C	1/3/0	-	-	-	-	
WBS AEC Q100-001	Cpk>1.67	500cyc	-	-	1/30/0	-	-	-	
WBP MIL-STD883 Method 2011	Cpk>1.67	500cyc	-	-	1/30/0	-	-	-	

- Preconditioning was performed for ACLV, TMCL, THBT as per JESD22-A113

* Passed wirebond pull test after TMCL 500cyc

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	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com