

PCN Number: 20141002000 **PCN Date:** 10/07/2014

Title: Qualification of GFAB as an additional Wafer Fab site option for select devices in ABCD05/ABCD5HV Technology

Customer Contact: [PCN Manager](#) **Phone:** +1(214)480-6037 **Dept:** Quality Services

Proposed 1st Ship Date: 01/07/2015 **Estimated Sample Availability:** Date provided at sample request.

Change Type:		
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>
<input type="checkbox"/>	Design	<input type="checkbox"/>
<input type="checkbox"/>	Test Site	<input type="checkbox"/>
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>
<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>
<input type="checkbox"/>	Wafer Bump Material	<input type="checkbox"/>
<input type="checkbox"/>	Wafer Fab Materials	<input type="checkbox"/>
<input type="checkbox"/>	Part number change	

PCN Details

Description of Change:

This change notification is to announce the addition of GFAB as an additional Wafer Fab site option for the products listed in the product affected section of this document.

Current Wafer Fab Site	Process	Wafer Diameter
MAINEFAB	ABCD05/ABCD5HV	200mm
Additional Fab Site	Process	Wafer Diameter
GFAB8	ABCD05/ABCD5HV	200mm

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 Site	Chip site code (20L)	Chip country code (21L)
MAINEFAB	CUA	USA

New

Chip Site	Chip site code (20L)	Chip country code (21L)
GFAB8	GF8	GBR


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





(1P) SN74LS07NSR
(Q) 2000 (D) 0336
(31T) LOT: 3959047MLA
(4W) TKY (1T) 7523483S12
(P)
(2P) REV: (V) 8033317
(20L) CS0: SHE (21L) CCO: USA
(22L) AG0: MLA (23L) AG0: MYS

Product Affected:

LM22678QUAL-ADJ/NOPB	LM22673TJE-ADJ/NOPB	LM25011AMYE	LM5114BMF/NOPB
LM22680B1MR-ADJ/NOPB	LM22674MR-5.0/NOPB	LM25011AMYX	LM5114BMF/S7003094
LM25011MEVALMY/NOPB	LM22674MR-ADJ/NOPB	LM25011MY/NOPB	LM5114BMF/S7003110
LM3150MH	LM22674MRE-5.0/NOPB	LM25011MYX/NOPB	LM5114BMFX/S7003094
LM3150MHX	LM22674MRE-ADJ/NOPB	LM25119PSQE/NOPB	LM5114BMFX/NOPB
LM5023D	LM22674MRX-5.0/NOPB	LM25119PSQX/NOPB	LMP8480MME-T/NOPB
LM5023DR	LM22674MRX-ADJ/NOPB	LM25119PSQ/NOPB	LMP8480MME-S/NOPB
LMP8481SDE-S/NOPB	LM22675MR-5.0/NOPB	LM2840XMK-ADJL/NOPB	LMP8480MM-S/NOPB
LMP8481SDE-T/NOPB	LM22675MR-ADJ/NOPB	LM2840XMKX-ADJL/NOPB	LMP8480MM-T/NOPB
LMP8481SD-S/NOPB	LM22675MRE-5.0/NOPB	LM2840YMK-ADJL/NOPB	LMP8480MMX-S/NOPB
LMP8481SD-T/NOPB	LM22675MRE-ADJ/NOPB	LM2840YMKX-ADJL/NOPB	LMP8480MMX-T/NOPB
LMP8481SDX-S/NOPB	LM22675MRX-5.0/NOPB	LM2841XBMKX/NOPB	LMP8481MME-T/NOPB
LMP8481SDX-T/NOPB	LM22675MRX-ADJ/NOPB	LM2841XMK-ADJL/NOPB	LMP8481MME-S/NOPB
LM22670MR-5.0/NOPB	LM22676MR-5.0/NOPB	LM2841XMKX-ADJL/NOPB	LMP8481MM-S/NOPB
LM22670MR-ADJ/J7002406	LM22676MR-ADJ/S7002530	LM2841YMK-ADJL/NOPB	LMP8481MM-T/NOPB
LM22670MR-ADJ/NOPB	LM22676MR-ADJ/NOPB	LM2841YMKX-ADJL-P	LMP8481MMX-S/NOPB
LM22670MRE-5.0/NOPB	LM22676MRE-5.0/NOPB	LM2841YMKX-ADJL/NOPB	LMP8481MMX-T/NOPB
LM22670MRE-ADJ/J7002407	LM22676MRE-ADJ/NOPB	LM2842XMK-ADJL/NOPB	LMP8650MME-T/NOPB
LM22670MRE-ADJ/NOPB	LM22676MRX-5.0/NOPB	LM2842XMKX-ADJL/NOPB	LMP8650MM-T/NOPB
LM22670MRX-5.0/NOPB	LM22676MRX-ADJ/NOPB	LM2842YMK-ADJL/NOPB	LMP8650MMX-T/NOPB
LM22670MRX-ADJ/J7002408	LM22676MRX-ADJ/S7002776	LM2842YMKX-ADJL/NOPB	LMR14203XMK/NOPB
LM22670MRX-ADJ/NOPB	LM22676TJ-5.0/NOPB	LM3150MH/J7002526	LMR14203XMKX/NOPB
LM22670TJ-5.0/NOPB	LM22676TJ-ADJ/J7002452	LM3150MH/NOPB	LMR14203XMKE/NOPB
LM22670TJ-ADJ/NOPB	LM22676TJ-ADJ/NOPB	LM3150MHE/J7002596	LMR14206XMK/NOPB
LM22670TJE-5.0/NOPB	LM22676TJE-5.0/NOPB	LM3150MHE/NOPB	LMR14206XMKX/NOPB
LM22670TJE-ADJ/NOPB	LM22676TJE-ADJ/NOPB	LM3150MHX/J7002527	LMR14206XMKE/NOPB
LM22671MR-5.0/NOPB	LM22676TJE-ADJ/J7002453	LM3150MHX/NOPB	LMZ23608HTZ/NOPB
LM22671MR-ADJ/NOPB	LM22677TJ-5.0/NOPB	LM3414HVMR/NOPB	LV13602MRX-ADJ/NOPB
LM22671MRE-5.0/NOPB	LM22677TJ-ADJ/J7002401	LM3414HVMRX/NOPB	LV13603AMRX-H/NOPB
LM22671MRE-ADJ/NOPB	LM22677TJ-ADJ/NOPB	LM3414HVSDX/NOPB	LV13603AMRX-ADJ/NOPB
LM22671MRX-5.0/NOPB	LM22677TJE-5.0/NOPB	LM3414HVSD/NOPB	LV13603ATJ-H/NOPB
LM22671MRX-ADJ/NOPB	LM22677TJE-ADJ/J7002402	LM3414MR/NOPB	LV13603ATJ-ADJ/NOPB
LM22672MR-5.0/NOPB	LM22677TJE-ADJ/NOPB	LM3414MRX/NOPB	LV13603BMRX-H/NOPB
LM22672MR-ADJ/NOPB	LM22678TJ-5.0/NOPB	LM3414SD/NOPB	LV13603BMRX-ADJ/NOPB
LM22672MRE-5.0/NOPB	LM22678TJ-ADJ/J7002567	LM3414SD/S7002686	LV13603BTJ-ADJ/NOPB
LM22672MRE-ADJ/NOPB	LM22678TJ-ADJ/NOPB	LM3414SDX/NOPB	LV13603BTJ-H/NOPB
LM22672MRX-5.0/NOPB	LM22678TJE-5.0/NOPB	LM34922MY/NOPB	LV13603CMRX-ADJ/NOPB
LM22672MRX-ADJ/NOPB	LM22678TJE-ADJ/NOPB	LM34922MYX/NOPB	LV13603CMRX-H/NOPB
LM22673MR-5.0/NOPB	LM22678TJE-ADJ/J7002566	LM34923MM/NOPB	LV13603CTJ-H/NOPB
LM22673MR-ADJ/NOPB	LM22679TJ-5.0/NOPB	LM34923MMX/NOPB	LV13603CTJ-ADJ/NOPB
LM22673MRE-5.0/NOPB	LM22679TJ-ADJ/NOPB	LM3492HCMHX/NOPB	LV13605TJ-ADJ/NOPB
LM22673MRE-ADJ/NOPB	LM22679TJE-5.0/NOPB	LM3492HCMH/NOPB	LV13605TJ-H/NOPB

LM22673MRX-5.0/NOPB	LM22679TJE-ADJ/NOPB	LM3492MH/NOPB	SN1206029HVNGQR/NOPB
LM22673MRX-ADJ/NOPB	LM22680MR-ADJ/NOPB	LM3492MHX/NOPB	SN1206029NGQR/NOPB
LM22673TJ-5.0/NOPB	LM22680MRE-ADJ/NOPB	LM5006MM/NOPB	LM22672MRX-5.0S1
LM22673TJ-ADJ/J7002341	LM22680MRX-ADJ/E7002609	LM5006MMX/NOPB	LM10540MH/NOPB
LM22673TJ-ADJ/NOPB	LM22680MRX-ADJ/NOPB	LM5023MM-2/NOPB	LM10540MHE/NOPB
LM22673TJE-5.0/NOPB	LM25011AMY	LM5023MMX-2/NOPB	LM10540MHX/NOPB
LM22673TJE-ADJ/J7002342			

**Qualification of ABCD5HV Process in GFAB Scotland
Approved 08/29/2014**

Attributes	Qual Device: LM5006MMNOPB
Wafer Fab Site	GFAB
Wafer Diameter	200mm
Wafer Process Technology	ABCD5HV

Qualification Results

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

Type	Test Spec	Test Name / Condition	Duration	Qual Device: LM5006MMNOPB
Accelerated Environment Stress Test				
PC	JESD22-113	Automotive Preconditioning Level 1	Level 1-260C	3/743/0
HAST	JESD22-A110	Biased HAST, 130C/85%RH	96 Hours	3/231/0
AC	JESD22-A102	Autoclave 121C	96 Hours	3/231/0
TC	JESD22-A104	Temperature Cycle, -65/150C	500 Cycles	3/231/0
HTSL	JESD22-A103	High Temp Storage Bake 150C	1000 Hours	1/50/0
Accelerated Lifetime Simulation Test				
HTOL	JESD22-A108	Life Test, 125C	1000 Hours	3/231/0
ELFR	AEC-Q100-008	Early Life Failure Rate, 125C	48 Hours	3/2400/0
Electrical Verification				
HBM	AEC-Q100-002	ESD - HBM	2000 V	3/9/0
CDM	AEC-Q100-011	ESD - CDM	750 V	3/9/0
LU	AEC-Q100-004	Latch-up	LUPS 25C	3/18/0
LU	AEC-Q100-004	Latch-up	LUPS 125C	3/18/0

(PC): Preconditioning;

Performed for Biased HAST, AC, & TC samples, as applicable.

Qualification Plan:				
This qualification has been developed for the validation of this change. The qualification data will validate that the proposed change meets the applicable released technical specifications.				
Qualification Schedule:	Start:	1/27/2014	End:	11/30/2014
Qualification Device# 2: LMP8480MM (MSL LEVEL1-260C)				
Wafer Fab Site:	GFAB	Wafer Fab Process:	ABCD5HV	
Wafer Diameter:	200mm			
Qualification: <input checked="" type="checkbox"/> Plan <input type="checkbox"/> Test Results				
Reliability Test	Conditions	Sample Size/Fails		
		Lot#1	Lot#2	Lot#3
High Temp Operating Life	150C (500 Hrs)	77/0	77/0	77/0
Early Life Failure Rate	150C (48 Hrs)	800/0	800/0	800/0
**High Temp. Storage Life	150C (1000 Hrs)	77/0	-	-
**Biased HAST	130C/85%RH (96 Hrs)	77/0	77/0	77/0
**Autoclave	121C (96 Hrs)	77/0	77/0	77/0
**Temp Cycle	-65C/+150C (500 Cycles)	77/0	77/0	77/0
ESD CDM	250V	3/0	3/0	3/0
ESD HBM	1000V	3/0	3/0	3/0
Latch-up	Per JESD78	6/0	6/0	6/0
EPROM Power Cycles	10K Cycles	77/0	77/0	77/0
EPROM Read Cycles	10K Read	77/0	77/0	77/0
Memory Retention	250C (168 Hrs)	77/0	77/0	77/0
Notes **Preconditioning sequence Level 1-260C				
Qualification Device# 3: LM22679QTJ-ADJ (MSL LEVEL1-260C)				
Wafer Fab Site:	GFAB	Wafer Fab Process:	ABCD05	
Wafer Diameter:	200mm			
Qualification: <input checked="" type="checkbox"/> Plan <input type="checkbox"/> Test Results				
Reliability Test	Conditions	Sample Size/Fails		
		Lot#1	Lot#2	Lot#3
High Temp Operating Life	150C (500 Hrs)	77/0	77/0	77/0
Electrical Characterization	Per datasheet	3/0	-	-
Early Life Failure Rate	150C (48 Hrs)	800/0	800/0	800/0
**High Temp. Storage Life	150C (1000 Hrs)	50/0	-	-
**Temp Cycle	-65C/+150C (500 Cycles)	77/0	77/0	77/0
ESD CDM	250V	3/0	3/0	3/0
ESD HBM	1000V	3/0	3/0	3/0
Latch-up	Per JESD78	6/0	6/0	6/0
Notes **Preconditioning sequence Level 1-260C				

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