PCN Number:	20231130001.1		PCN Date:	December 04, 2023
Title:	Qualification of UMC-F12 as an additional Fab site option and TI Clark as an additional Assembly site for select devices			
Customer Contact:	Change Management Team		Dept:	Quality Services
Proposed 1st Ship Date:	Mar 4, 2024		Sample requests accepted until:	Jan 4, 2024*

*Sample requests received after Jan 04, 2024 will not be supported.

Change Type:

☒	Assembly Site	☐	Design	☐	Wafer Bump Material
☐	Assembly Process	☐	Data Sheet	☐	Wafer Bump Process
☐	Assembly Materials	☐	Part number change	☒	Wafer Fab Site
☐	Mechanical Specification	☐	Test Site	☐	Wafer Fab Material
☐	Packing/Shipping/Labeling	☐	Test Process	☐	Wafer Fab Process

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of its UMC-F12 fabrication facility as an additional Wafer Fab option and TI Clark as an additional Assembly site.

Current Fab Site			New Fab Site		
Current Fab Site	Process	Wafer Diameter	New Fab Site	Process	Wafer Diameter
RFAB	LBC9	300 mm	UMC-F12	LBC9	300 mm

Material Differences:

No material differences between Assembly sites.

Reason for Change:

Supply Continuity

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

None

Impact on Environmental Ratings

Checked boxes indicate the status of environmental ratings following implementation of this change. If below boxes are checked, there are no changes to the associated environmental ratings.

RoHS	REACH	Green Status	IEC 62474
☒ No Change	☒ No Change	☒ No Change	☒ No Change

Changes to product identification resulting from this PCN:

Fab Site Information:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
RFAB	RFB	USA	Richardson
UMC-F12	**F12**	**TWN**	**Tainan**

Assembly Site Information:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
TI Chengdu	CDA	CHN	Chengdu
TI Clark	**QAB**	**PHL**	**Angeles City, Pampanga**

Sample product shipping label (not actual product label):

Texas Instruments	(Pb) G4		(1P) SN74LS07NSR

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)TO:1750

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

Product Affected:

BQ24179YBGR	BQ25790YBGR	BQ25790YBGT

Qualification Report
Approve Date 16-FEBRUARY-2022

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

Type	Test Name / Condition	Duration	Qual Device: BQ25790YBG	QBS Process/Package Reference: BQ25960YBG	QBS Process Reference: BQ25980YFF
-	Bump-shear (WCSP)	min 50 bumps	-	3/150/0	-
-	Manufacturability TQ - Testability	(per mfg. Site specification)	1/Pass	1/Pass	1/Pass
CDM	ESD - CDM	750 V	-	-	1/3/0
CDM	ESD - CDM	1500 V	1/3/0	1/3/0	-
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0	1/30/0	1/30/0
HAST	Biased HAST, 130C/85%RH	96 hours		3/231/0	3/231/0
HBM	ESD - HBM	4000 V	1/3/0	1/3/0	1/3/0
HTOL	Life Test, 125C	1000 hours	1/77/0	1/77/0	1/77/0
HTSL	High Temp Storage Bake 150C	1000 hours	1/77/0	3/231/0	3/231/0
LU	Latch-up	(per JESD78), Ta=Room, high	1/6/0	1/6/0	1/6/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	1/Pass	1/Pass	3/Pass
MQ	Manufacturability (Bump)	(per mfg. Site specification)	-	1/Pass	1/Pass
TC	Temperature Cycle, -55/125C	700 cycles	-	3/231/0	3/231/0
UHAST	Unbiased HAST 130C/85%RH	96 hours	-	3/231/0	3/231/0

QBS: Qual By Similarity
Qual Device BQ25790YBG is qualified at LEVEL1-260C
Qual Device BQ24179YBG is qualified at LEVEL1-260C. BQ24179YBG is a paper spin of BQ25790YBG. The only difference between those devices is the top marking.

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 Change Management team or your local Field Sales Representative.

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