



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20240905000.1
Qualification of UMC-F12 as additional Fab site for select LBC9 devices
Change Notification / Sample Request

Date: September 05, 2024
To: MOUSER PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

Texas Instruments requires acknowledgement of receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance and approval of this change. If samples or additional data are required, requests must be received within **30 days** of this notification.

The changes discussed within this PCN will not take effect any earlier than the proposed first ship date on Page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice or to provide acknowledgement of this PCN, you may contact your local Field Sales Representative or the change management team.

For sample requests or sample related questions, contact your local Field Sales Representative.

Sincerely,

Change Management Team
SC Business Services

20240905000.1
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, you have recently purchased these devices. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
BQ25672RQMR	NULL
BQ25792RQMR	NULL
BQ25798RQMR	NULL
TPS25751DREFR	NULL
TPS25751SRSMR	NULL

Technical details of this Product Change follow on the next page(s).

PCN Number:	20240905000.1	PCN Date:	September 05, 2024		
Title:	Qualification of UMC-F12 as additional Fab site for select LBC9 devices				
Customer Contact:	Change Management Team	Dept:	Quality Services		
Proposed 1st Ship Date:	December 04, 2024	Sample requests accepted until:	October 05, 2024*		
*Sample requests received after October 05, 2024 will not be supported.					
Change Type:					
<input type="checkbox"/> Assembly Site	<input type="checkbox"/> Design	<input type="checkbox"/> Wafer Bump Material			
<input type="checkbox"/> Assembly Process	<input type="checkbox"/> Data Sheet	<input type="checkbox"/> Wafer Bump Process			
<input type="checkbox"/> Assembly Materials	<input type="checkbox"/> Part number change	<input checked="" type="checkbox"/> Wafer Fab Site			
<input type="checkbox"/> Mechanical Specification	<input type="checkbox"/> Test Site	<input type="checkbox"/> Wafer Fab Material			
<input checked="" type="checkbox"/> Packing/Shipping/Labeling	<input type="checkbox"/> Test Process	<input type="checkbox"/> Wafer Fab Process			
PCN Details					
Description of Change:					
Texas Instruments is pleased to announce the addition of UMC-F12 as an additional Wafer Fab site option for the products listed in the "Product Affected" section of this document.					
Current Fab Site			Additional Fab Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
RFAB	LBC9	300 mm	UMC-F12	LBC9	300 mm
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:					
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		
Sample product shipping label (not actual product label):					
Product Affected:					
BQ25672RQMR	BQ25792RQMR	BQ25798RQMR			
TPS25751DREFR	TPS25751SRSMR				

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: BQ25792RQMR	QBS Reference: BQ25792RQMR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	3/231/0
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	3/231/0
TC	A4	Temperature Cycle	-55C/125C	700 Cycles	1/77/0	3/231/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	3/231/0
HTOL	B1	Life Test	125C	1000 Hours	1/77/0	3/231/0
PD	C4	Physical Dimensions	(per mechanical drawing)	-	-	3/15/0
ESD	E2	ESD CDM	-	1500 Volts	1/3/0	1/3/0
ESD	E2	ESD HBM	-	4000 Volts	1/3/0	1/3/0
LU	E4	Latch-Up	Per JESD78	-	1/6/0	1/3/0
CHAR	E5	Electrical Characterization	Min, Typ, Max Temp	-	-	1/30/0
FTY	E6	Final Test Yield	-	-	1/1/0	-

- QBS: Qual By Similarity
- Qual Device BQ25792RQMR is qualified at MSL2 260C

- 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

TI Qualification ID: R-CHG-2108-035

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: BQ25798RQMR	QBS Package/Process/Product Reference: BQ25792RQMR	QBS Package/Process/Product Reference: BQ25792RQMR	QBS Process Reference: CD3253DB0YCHR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	3/231/0	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	-	3/231/0	-
TC	A4	Temperature Cycle	-55C/125C	700 Cycles	-	1/77/0	3/231/0	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-	3/231/0	-
HTOL	B1	Life Test	125C	1000 Hours	-	1/77/0	3/231/0	3/231/0
ELFR	B2	ELFR	125C	48 Hours				3/3000/0
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB Solder;	-	-	-	1/22/0	-

Type	#	Test Name	Condition	Duration	Qual Device: BQ25798RQMR	QBS Package/Process/Product Reference: BQ25792RQMR	QBS Package/Process/Product Reference: BQ25792RQMR	QBS Process Reference: CD3253DB0YCHR
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB- Free Solder;	-	-	-	3/66/0	-
PD	C4	Physical Dimensions	(per mechanical drawing)	-	-	-	3/15/0	-
ESD	E2	ESD CDM	-	250 Volts	1/3/0	-	-	-
ESD	E2	ESD HBM	-	1000 Volts	1/3/0	-	-	-
LU	E4	Latch-Up	Per JESD78	-	1/6/0	-	-	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	-	-
FTY	E6	Final Test Yield	-	-	1/PASS	-	-	-

- QBS: Qual By Similarity
- Qual Device BQ25798RQMR is qualified at MSL2 260C

- 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/>

TI Qualification ID: R-CHG-2108-003

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: TPS65992SBGRSMR	Qual Device: TPS65992SBGRSMR	Qual Device: TPS65992FBGRSMR	Qual Device: TPS65992FBGRSMR	Qual Device: TPS65992DBGREFR	Qual Device: TPS65992DBGREFR	QBS Reference: PTPS65992SA0CRSMR	QBS Reference: PTPS65992SADRSMR
HAST	A2	Biased HAST	110C/85%RH	264 Hours	-	-	-	-	-	-	1/77/0	-
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	-	-	-	-	-	-
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	-	-	-	-	1/77/0	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	-	-	-	-	-	-	-
TC	A4	Temperature Cycle	-55C/125C	700 Cycles	-	-	-	-	-	-	-	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	-	-	-	-	-	1/77/0	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-	-	-	-	-	1/77/0	-
HTSL	A6	High Temperature Storage Life	175C	420 Hours	-	-	-	-	-	-	-	-
HTOL	B1	Life Test	125C	1000 Hours	-	-	-	-	-	-	2/154/0	1/77/0
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	-	-	-	-	2/1600/0	1/800/0
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB Solder;	-	-	-	-	-	-	-	-	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB- Free Solder;	-	-	-	-	-	-	-	-	-
PD	C4	Physical Dimensions	(per mechanical drawing)	-	-	-	-	-	-	-	-	-

Type	#	Test Name	Condition	Duration	Qual Device: TPS65992SBGRSMR	Qual Device: TPS65992SBGRSMR	Qual Device: TPS65992FBGRSMR	Qual Device: TPS65992FBGRSMR	Qual Device: TPS65992DBGREFR	Qual Device: TPS65992DBGREFR	QBS Reference: PTPS65992SA0CRSMR	QBS Reference: PTPS65992SADRSMR
ESD	E2	ESD CDM	-	1000 Volts	-	-	-	-	-	-	-	-
ESD	E2	ESD CDM	-	1500 Volts	-	-	-	-	-	-	-	1/3/0
ESD	E2	ESD HBM	-	1500 Volts	-	-	-	-	-	-	-	1/3/0
ESD	E2	ESD HBM	-	2500 Volts	-	-	-	-	-	-	-	-
ESD	E2	ESD HBM	-	4000 Volts	-	-	-	-	-	-	-	-
LU	E4	Latch-Up	Per JESD78	-	-	-	-	-	-	-	-	1/3/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	-	-	-	-	-	-
FTY	E6	Final Test Yield	-	-	1/1/0	1/1/0	1/1/0	1/1/0	1/1/0	1/1/0	-	-

- QBS: Qual By Similarity
- Qual Device TPS65992SBGRSMR is qualified at MSL2 260C
- Qual Device TPS65992SBGRSMR is qualified at MSL2 260C
- Qual Device TPS65992EBGRSMR is qualified at MSL2 260C
- Qual Device TPS65992EBGRSMR is qualified at MSL2 260C
- Qual Device TPS65992DBGREFR is qualified at MSL2 260C
- Qual Device TPS65992DBGREFR is qualified at MSL2 260C

- 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

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TI Qualification ID: R-CHG-2301-010

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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