12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20201202000.2
Qualification of AIZU as an additional Fab Site option for select CMOS9T devices
Change Notification / Sample Request

Date: December 07, 2020
To: TOKYO ELECTRON DEVICE (DSTR) 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 of the 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 PCN Team (PCN_ww_admin_team@list.ti.com). For sample requests or sample related questions, contact your local Field Sales Representative.

Sincerely,

PCN Team
SC Business Services

20201202000.2
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past sixty (60) months. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
LP5907QMFX-3.3Q1	null
LP5907QMFX-1.8Q1	null
LP5907QMFX-3.0Q1	null
LP5907QMFX-2.8Q1	null

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

PCN Number:	20201202000.2	**PCN Date:**	Dec 7, 2020
Title:	Qualification of AIZU as an additional Fab Site option for select CMOS9T devices		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	Jun 7, 2021	**Estimated Sample Availability:**	Date provided at sample request.

Change Type:

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

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of its AIZU fabrication facility as an additional Wafer Fab source for the selected devices listed in "Product Affected" section.

Current Sites			Additional Sites		
Current Fab Site	**Process**	**Wafer Diameter**	**Additional Fab Site**	**Process**	**Wafer Diameter**
MAINEFAB	CMOS9T	200mm	AIZU	CMOS9T	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 Site	Chip Site Origin (20L)	Chip Site Country Code (21L)	Chip Site City
MAINEFAB	CUA	USA	South Portland

New Fab Site

Chip Site	Chip Site Origin (20L)	Chip Site Country Code (21L)	Chip Site City
AIZU	CU2	JPN	Aizuwakamatsu-shi

Sample product shipping label (not actual product label)

Product Affected:

LP5907QMFX-1.2Q1	LP5907QMFX-2.5Q1	LP5907QMFX-3.0Q1	LP5907QMFX-3.8Q1
LP5907QMFX-1.8Q1	LP5907QMFX-2.8Q1	LP5907QMFX-3.3Q1	LP5907QMFX-4.5Q1

Automotive New Product Qualification Summary
(As per AEC-Q100 and JEDEC Guidelines)

Offload : LP5907AZ (CMOS9T) : Aizu Fab (From MFAB) DBV at TIEM Q100 Grade1

Approved
October 16, 2019

Product Attributes

Attributes	Qual Device: LP5907QMFX-1.2Q1	Qual Device: LP5907QMFX-1.8Q1	Qual Device: LP5907QMFX-2.5Q1	Qual Device: LP5907QMFX-2.8Q1	Qual Device: LP5907QMFX-3.0Q1	Qual Device: LP5907QMFX-3.3Q1	Qual Device: LP5907QMFX-3.8Q1
Automotive Grade Level	Grade 1	Grade 1	Grade 1	Grade 1	Grade 1	Grade 1	Grade 1
Operating Temp Range	-40 to +125 C	-40 to +125 C	-40 to +125 C	-40 to +125 C	-40 to +125 C	-40 to +125 C	-40 to +125 C
Product Function	Power Management	Power Management	Power Management	Power Management	Power Management	Power Management	Power Management
Die Attributes	-	-	-	-	-	-	-
Wafer Process ID	CMOS9T	CMOS9T	CMOS9T	CMOS9T	CMOS9T	CMOS9T	CMOS9T
Package Attributes	-	-	-	-	-	-	-
Assembly Site	TIEM-AT	TIEM-AT	TIEM-AT	TIEM-AT	TIEM-AT	TIEM	TIEM
Package Type	SOT-23	SOT-23	SOT-23	SOT-23	SOT-23	SOT-23	SOT-23
Package Designator	DBV	DBV	DBV	DBV	DBV	DBV	DBV
Ball/Lead Count	5	5	5	5	5	5	5
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0

Product Attributes

Attributes	Qual Device: LP5907QMFX-4.5Q1	QBS Process Reference: BQ76PL455APFC-Q1	QBS Process Reference: LDC1612QDNTQ1	QBS Process Reference: LDC1614QRGHRQ1	QBS Product/Process Reference LP5907xxQDQNRQ1	QBS Package Reference: LM4128AQ1MF-4.1	QBS Package Reference: LP5907QMFX-4.5Q1
Automotive Grade Level	Grade 1	Grade 2	Grade 1	Grade 1	Grade 1	Grade 1	Grade 1
Operating Temp Range	-40 to +125 C	-40 to +105 C	-40 to +125 C	-40 to +125 C	-40 to +125 C	-40 to +125 C	-40 to +125 C
Product Function	Power Management	Power Management	Signal Chain	Signal Chain	Power Management	Power Management	Power Management
Die Attributes	-	-	-	-		-	-
Wafer Process ID	CMOS9T	CMOS9T, VIP50CLZ3	CMOS 9T	CMOS 9T	CMOS 9T	CMOS CS65	CMOS9T
Package Attributes	-	-	-	-		-	-
Assembly Site	TIEM	TITL (TAI)	TIEM	TIEM	Hana	TIEM	TIEM
Package Type	SOT-23	TQFP	WSON	WQFN	uQFN	SOT23	SOT-23
Package Designator	DBV	PFC	DNT	RGH	DQN	DBV	DBV
Ball/Lead Count	5	80	12	16	4	5	5
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0

- QBS: Qual By Similarity
- Qual Device LP5907QMFX-3.8Q1 is qualified at LEVEL1-260C
- Qual Device LP5907QMFX-1.2Q1 is qualified at LEVEL1-260C
- Qual Device LP5907QMFX-2.8Q1 is qualified at LEVEL1-260C
- Qual Device LP5907QMFX-3.0Q1 is qualified at LEVEL1-260C
- Qual Device LP5907QMFX-3.3Q1 is qualified at LEVEL1-260C
- Qual Device LP5907QMFX-4.5Q1 is qualified at LEVEL1-260C
- Qual Device LP5907QMFX-1.8Q1 is qualified at LEVEL1-260CG
- Qual Device LP5907QMFX-2.5Q1 is qualified at LEVEL1-260C

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

Type	#	Test Spec	Min Lot Qty	SS/Lot	Test Name / Condition	Duration	Qual Device: LP5907QMFX-1.2Q1	Qual Device: LP5907QMFX-1.8Q1	Qual Device: LP5907QMFX-2.5Q1	Qual Device: LP5907QMFX-2.8Q1	Qual Device: LP5907QMFX-3.0Q1	Qual Device: LP5907QMFX-3.3Q1	Qual Device: LP5907QMFX-3.8Q1
Test Group A – Accelerated Environment Stress Tests													
PTC	A5	JEDEC JESD22-A105	1	45	Power Temperature Cycle	1000 Cycles	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Test Group B – Accelerated Lifetime Simulation Tests													
Test Group C – Package Assembly Integrity Tests													
SBS	C5	AEC Q100-010	3	50	Solder Ball Shear (Cpk>1.67)	Post HTSL/Bump	N/A for Package	N/A for Package	N/A for Package	N/A for Package	N/A for Package	N/A for Package	N/A for Package
SBS	C5	AEC Q100-010	3	50	Solder Ball Shear (Cpk>1.67)	Solder Balls	N/A for Package	N/A for Package	N/A for Package	N/A for Package	N/A for Package	N/A for Package	N/A for Package
Test Group D – Die Fabrication Reliability Tests													
EM	D1	JESD61	-	-	Electromigration	-	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements
TDDB	D2	JESD35	-	-	Time Dependant Dielectric Breakdown	-	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements
HCI	D3	JESD60 & 28	-	-	Hot Injection Carrier	-	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements
NBTI	D4	-	-	-	Negative Bias Temperature Instability	-	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements
SM	D5	-	-	-	Stress Migration	-	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements
Test Group E – Electrical Verification Tests													
HBM	E2	AEC Q100-002	1	3	ESD - HBM - Q100	1000 V	1/3/0	-	-	-	-	1/3/0	-
HBM	E2	AEC Q100-002	1	3	ESD - HBM - Q100	1500 V	1/3/0	-	-	-	-	1/3/0	-
HBM	E2	AEC Q100-002	1	3	ESD - HBM - Q100	2000 V	1/3/0	-	-	-	-	1/3/0	-
HBM	E2	AEC Q100-002	1	3	ESD - HBM - Q100	2500 V	1/3/0	-	-	-	-	1/3/0	-
HBM	E2	AEC Q100-002	1	3	ESD - HBM - Q100	3000 V	1/3/0	-	-	-	-	1/3/0	-
HBM	E2	AEC Q100-002	1	3	ESD - HBM - Q100	4000 V	1/3/0	-	-	-	-	1/3/0	-
HBM	E2	AEC Q100-002	1	3	ESD - HBM - Q100	500 V	1/3/0	-	-	-	-	1/3/0	-
CDM	E3	AEC Q100-011	1	3	ESD - CDM - Q100	1000 V	1/3/0	-	-	-	-	1/3/0	-
CDM	E3	AEC Q100-011	1	3	ESD - CDM - Q100	1500 V	1/3/0	-	-	-	-	1/3/0	-
CDM	E3	AEC Q100-011	1	3	ESD - CDM - Q100	250 V	1/3/0	-	-	-	-	1/3/0	-
CDM	E3	AEC Q100-	1	3	ESD - CDM - Q100	500 V	1/3/0	-	-	-	-	1/3/0	-

	Type	#	Test Spec	Min Lot Qty	SS/Lot	Test Name / Condition	Duration	Qual Device: LP5907QMFX-1.2Q1	Qual Device: LP5907QMFX-1.8Q1	Qual Device: LP5907QMFX-2.5Q1	Qual Device: LP5907QMFX-2.8Q1	Qual Device: LP5907QMFX-3.0Q1	Qual Device: LP5907QMFX-3.3Q1	Qual Device: LP5907QMFX-3.8Q1
			011											
	CDM	E3	AEC Q100-011	1	3	ESD - CDM - Q100	750 V	1/3/0	-	-	-	-	1/3/0	-
	LU	E4	AEC Q100-004	1	6	Latch-up	Latchup/125c	1/6/0	-	-	-	-	-	-
	ED	E5	AEC Q100-009	3	30	Auto Electrical Distributions	Cpk>1.67 Room, hot, and cold test	1/30/0	1/30/0	1/30/0	1/30/0	1/30/0	1/30/0	1/30/0

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

	Type	#	Test Spec	Min Lot Qty	SS/Lot	Test Name / Condition	Duration	Qual Device: LP5907QMFX-4.5Q1	QBS Process Reference: BQ76PL455APFC-Q1	QBS Process Reference: LDC1612QDNTQ1	QBS Process Reference: LDC1614QRGHRQ1	QBS Product/Process Reference LP5907xxQDQNRQ1	QBS Package Reference: LM4128AQ1MF-4.1	QBS Package Reference: LP5907QMFX-4.5Q1
Test Group A – Accelerated Environment Stress Tests														
	PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Automotive Preconditioning Level 1	3X IR REFLOW/260 C+5 / -0C	1/160/0	-	-	3/693/0		3/893/0	1/392/0
	PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Automotive Preconditioning Level 3	Auto Precon L3/260	-	1/270/0	4/770/0	-		-	-
	HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST, 110C/85%RH	264 hours	-	1/77/0	-	-		-	-
	HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST, 130C/85%RH	96HRS	1/77/0	-	3/231/0	3/231/0		3/231/0	1/160/0
	AC	A3	JEDEC JESD22-A102	3	77	Autoclave 121C	96HRS	1/77/0	1/77/0	3/231/0	3/231/0		3/231/0	1/77/0
	TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle, -65/150C	500CYC	1/77/0	1/77/0	3/231/0	3/231/0		3/231/0	1/77/0
	TC-WBP	A4	MIL-STD883 Method 2011	1	30	Auto Post TC Bond Pull	per MIL-STD 883 Method 2011	1/30/0	1/30/0	1/30/0	1/30/0		1/Pass	1/30/0
	PTC	A5	JEDEC JESD2	1	45	Power Temperature	1000 Cycles	N/A	-	-	-		-	-

	Type	#	Test Spec	Min Lot Qty	SS/Lot	Test Name / Condition	Duration	Qual Device: LP5907QMFX-4.5Q1	QBS Process Reference: BQ76PL455APFC-Q1	QBS Process Reference: LDC1612QDNTQ1	QBS Process Reference: LDC1614QRGHRQ1	QBS Product/Process Reference LP5907xxQDQNRQ1	QBS Package Reference: LM4128AQ1MF-4.1	QBS Package Reference : LP5907QMFX-4.5Q1
			2-A105			Cycle								
	HTSL	A6	JEDEC JESD22-A103	1	45	High Temp Storage Bake 150C	1000 hours	1/77/0	-	1/77/0	1/45/0		-	-
	HTSL	A6	JEDEC JESD22-A103	1	45	High Temp Storage Bake 175C	500 hours	-	-	-	-		-	3/231/0
Test Group B – Accelerated Lifetime Simulation Tests														
	HTOL	B1	JEDEC JESD22-A108	3	77	Life Test, 125C	1000HRS	1/77/0	3/231/0	3/230/0	1/77/0	2/154/0	3/231/0	2/154/0
	ELFR	B2	AEC Q100-008	3	800	Auto Early Life Failure Rate Grade 1	150C(24 Hrs)	-	-	-	-		3/2400/0	-
	ELFR	B2	AEC Q100-008	3	800	Early Life Failure Rate, 125C	125C (24 Hrs).	-	3/2400/0	-	-		-	-
	ELFR	B2	AEC Q100-008	3	800	Early Life Failure Rate, 125C	48 hours	-	-	3/2400/0	-		-	2/800/0
	EDR	B3	AEC Q100-005	3	77	NVM Endurance, Data Retention,	-	N/A	-	-	-		-	-
	EDR	B3	AEC Q100-005	3	77	W/E Endur High Temp	W/E 100cy/125C + 150C/1000hrs.	-	3/231/0	-	-		-	-
	EDR	B3	AEC Q100-005	3	77	W/E Endur Low Temp	W/E 100cy/ -40C + 150C/1000hrs.	-	3/231/0	-	-		-	-
	EDR	B3	AEC Q100-005	3	77	W/E Endur Room Temp	W/E 100cy/25C + 150C/1000hrs.	-	3/231/0	-	-		-	-
Test Group C – Package Assembly Integrity Tests														
	WBS	C1	AEC Q100-001	1	30	Auto Wire Bond Shear	Minimum of 5 devices, 30 wires Cpk > 1.67	3/90/0	1/30/0	-	-		-	-
	WBP	C2	MIL-STD88	1	30	Bond Pull	30 Wire, 5 units min	3/90/0	1/30/0	-	-		1/Pass	-

Type	#	Test Spec	Min Lot Qty	SS/Lot	Test Name / Condition	Duration	Qual Device: LP5907QMFX-4.5Q1	QBS Process Reference: BQ76PL455APFC-Q1	QBS Process Reference: LDC1612QDNTQ1	QBS Process Reference: LDC1614QRGHRQ1	QBS Product/Process Reference LP5907xxQDQNRQ1	QBS Package Reference: LM4128AQ1MF-4.1	QBS Package Reference : LP5907QMFX-4.5Q1
		3 Method 2011											
SD	C3	JEDEC JESD22-B102	1	15	Solderability	Steam age, 8 hours; PB-Free solder	1/15/0	-	-	1/30/0	-	1/Pass	-
PD	C4	JEDEC JESD22-B100 and B108	3	10	Auto Physical Dimensions	Cpk>1.67	3/30/0	-	3/Pass	3/30/0		1/Pass	-
SBS	C5	AEC Q100-010	3	50	Solder Ball Shear (Cpk>1.67)	Post HTSL/Bump	N/A for Package	-	-	-		-	-
SBS	C5	AEC Q100-010	3	50	Solder Ball Shear (Cpk>1.67)	Solder Balls	N/A for Package	-	-	-		-	-
LI	C6	JEDEC JESD22-B105	1	50	Lead Pull to Destruction	To Dest./Rec.Data	-	1/50/0	-	-		-	-
Test Group D – Die Fabrication Reliability Tests													
EM	D1	JESD61	-	-	Electromigration	-	Completed Per Process Technology Requirements	-	-	-		-	-
TDDB	D2	JESD35	-	-	Time Dependant Dielectric Breakdown	-	Completed Per Process Technology Requirements	-	-	-		-	-

Type	#	Test Spec	Min Lot Qty	SS/Lot	Test Name / Condition	Duration	Qual Device: LP5907QMFX-4.5Q1	QBS Process Reference: BQ76PL455APFC-Q1	QBS Process Reference: LDC1612QDNTQ1	QBS Process Reference: LDC1614QRGHRQ1	QBS Product/Process Reference LP5907xxQDQNRQ1	QBS Package Reference: LM4128AQ1MF-4.1	QBS Package Reference : LP5907QMFX-4.5Q1
HCI	D3	JESD60 & 28	-	-	Hot Injection Carrier	-	Completed Per Process Technology Requirements	-	-	-		-	-
NBTI	D4	-	-	-	Negative Bias Temperature Instability	-	Completed Per Process Technology Requirements	-	-	-		-	-
SM	D5	-	-	-	Stress Migration	-	Completed Per Process Technology Requirements	-	-	-		-	-
Test Group E – Electrical Verification Tests													
HBM	E2	AEC Q100-002	1	3	ESD - HBM - Q100	500 V	1/3/0	-	-	-		1/3/0	1/3/0
HBM	E2	AEC Q100-002	1	3	ESD - HBM - Q100	1000 V	1/3/0	-	-	-		1/3/0	1/3/0
HBM	E2	AEC Q100-002	1	3	ESD - HBM - Q100	1500 V	1/3/0	-	-	-		1/3/0	1/3/0
HBM	E2	AEC Q100-002	1	3	ESD - HBM - Q100	2000 V	1/3/0	-	-	-		1/3/0	1/3/0
HBM	E2	AEC Q100-002	1	3	ESD - HBM - Q100	2500 V	1/3/0	-	3/9/0	1/3/0		1/3/0	1/3/0
HBM	E2	AEC Q100-002	1	3	ESD - HBM - Q100	3000 V	1/3/0	1/3/0	-	-		-	-
HBM	E2	AEC Q100-002	1	3	ESD - HBM - Q100	4000 V	1/3/0	-	-	-		-	-

	Type	#	Test Spec	Min Lot Qty	SS/Lot	Test Name / Condition	Duration	Qual Device: LP5907QMFX-4.5Q1	QBS Process Reference: BQ76PL455APFC-Q1	QBS Process Reference: LDC1612QDNTQ1	QBS Process Reference: LDC1614QRGHRQ1	QBS Product/Process Reference LP5907xxQDQNRQ1	QBS Package Reference: LM4128AQ1MF-4.1	QBS Package Reference : LP5907QMFX-4.5Q1
	CDM	E3	AEC Q100-011	1	3	ESD - CDM - Q100	1000 V	1/3/0	-	3/9/0	1/3/0		1/3/0	1/3/0
	CDM	E3	AEC Q100-011	1	3	ESD - CDM - Q100	1500 V	1/3/0	-	-	-		-	1/3/0
	CDM	E3	AEC Q100-011	1	3	ESD - CDM - Q100	250 V	1/3/0	-	-	-		-	1/3/0
	CDM	E3	AEC Q100-011	1	3	ESD - CDM - Q100	500 V	1/3/0	-	-	-		1/3/0	1/3/0
	CDM	E3	AEC Q100-011	1	3	ESD - CDM - Q100	750 V	1/3/0	1/3/0	-	-		1/3/0	1/3/0
	LU	E4	AEC Q100-004	1	6	Latch-up	25C	1/6/0	1/6/0	3/18/0	1/6/0		1/6/0	1/6/0
	LU	E4	AEC Q100-004	1	6	Latch-up	Latchup/125c	1/6/0	1/6/0	3/18/0	1/6/0		1/6/0	1/6/0
	ED	E5	AEC Q100-009	3	30	Auto Electrical Distributions	Cpk>1.67 Room, hot, and cold test	3/90/0	3/Pass	3/Pass	3/Pass		1/Pass	-
Additional Tests														
	-			-	-	Auto Solderability (Pb)	>95% Lead Coverage 8 Hr Steam Age	-	-	1/Pass	-		-	-
	-			-	-	Auto Solderability (Pb-Free)	>95% Lead Coverage 8 Hr Steam Age	-	-	1/Pass	-		-	-
	-			-	-	Precondition Prior to HTSL	3X IR REFLOW/260 C+5 / -0C	1/80/0	-	-	-		-	-
	MQ			-	-	Manufacturability (Auto Assembly)	(per automotive requirements)	3/Pass	1/Pass	3/Pass	3/Pass		1/Pass	-
	MQ			-	-	Manufacturability (Wafer Fab)	(per mfg. Site specification)		1/Pass	3/Pass	-		-	-

A1 (PC): Preconditioning:
Performed for THB, Biased HAST, AC, uHAST, TC & PTC samples, as applicable.

Ambient Operating Temperature by Automotive Grade Level:
Grade 0 (or E): -40°C to +150°C
Grade 1 (or Q): -40°C to +125°C
Grade 2 (or T): -40°C to +105°C
Grade 3 (or I): -40°C to +85°C

E1 (TEST): Electrical test temperatures of Qual samples (High temperature according to Grade level):
Room/Hot/Cold: HTOL, ED
Room/Hot: THB / HAST, TC / PTC, HTSL, ELFR, ESD & LU
Room: AC/uHAST

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
WW PCN Team	PCN_ww_admin_team@list.ti.com

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