




<b>PCN Number:</b>	20230523000.2		<b>PCN Date:</b>	May 23, 2023					
<b>Title:</b>	Qualification of RFAB as an additional Fab site and additional wafer Probe site (SCTF & CLARK-PR) options for select devices								
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>		<b>Dept:</b>	Quality Services					
<b>Proposed 1<sup>st</sup> Ship Date:</b>	Nov 23, 2023		<b>Sample requests accepted until:</b>	Jun 23, 2023*					
<b>*Sample requests received after June 23, 2023 will not be supported.</b>									
<b>Change Type:</b>									
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Site				
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Material				
<input type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Bump Process				
<input type="checkbox"/>	Mechanical Specification	<input checked="" type="checkbox"/>	Test Site	<input checked="" type="checkbox"/>	Wafer Fab Site				
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input checked="" type="checkbox"/>	Wafer Fab Materials				
		<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Process				
<b>PCN Details</b>									
<b>Description of Change:</b>									
Texas Instruments is pleased to announce the qualification of its RFAB fabrication facility as an additional Wafer Fab source and SCTF and CLARK-PR as additional probe site options for the selected devices listed in the "Product Affected" section.									
<b>Current Fab Site</b>			<b>Additional Fab Site</b>						
<b>Current Fab Site</b>	<b>Process</b>	<b>Wafer Diameter</b>	<b>Additional Fab Site</b>	<b>Process</b>	<b>Wafer Diameter</b>				
MIHO8	LBC7	200 mm	RFAB	LBC7	300 mm				
Probe site changes are as follows:									
<b>Group 2 Devices:</b>									
<b>Current Probe Site</b>		<b>Additional Probe Site</b>							
MIHO8		SCTF / CLARK-PR							
Test coverage, insertions, conditions will remain consistent with current testing.									
<b>Reason for Change:</b>									
Continuity of Supply									
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>									
None									
<b>Changes to product identification resulting from this PCN:</b>									
<b>Fab Site Information:</b>									
Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City						
MIHO8	MH8	JPN	Ibaraki						
<b>RFAB</b>	<b>RFB</b>	<b>USA</b>	<b>Richardson</b>						
Sample product shipping label (not actual product label)									
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;">  <p><b>TEXAS INSTRUMENTS</b> MADE IN: Malaysia 2DC: 20:</p> <table border="1" style="font-size: small;"> <tr> <td>MSL 2 / 260C / 1 YEAR</td> <td>SEAL DT</td> </tr> <tr> <td>MSL 1 / 235C / UNLIM</td> <td>03/29/04</td> </tr> </table> <p>OPT: ITEM: 39 <b>LBL: 5A (L)T0:1750</b></p> </div> <div style="width: 20%; text-align: center;">   </div> <div style="width: 40%;"> <p>(1P) <b>SN74LS07NSR</b> (Q) <b>2000</b> (D) <b>0336</b> (31T) LOT: 3959047MLA (4W) TKY (1T) 7523483SI2 (P) (2P) REV: (V) 0033317 (20L) CS0: SHE (21L) CC0:USA (22L) AS0: MLA (23L) AC0: MYS</p> </div> </div>						MSL 2 / 260C / 1 YEAR	SEAL DT	MSL 1 / 235C / UNLIM	03/29/04
MSL 2 / 260C / 1 YEAR	SEAL DT								
MSL 1 / 235C / UNLIM	03/29/04								

**Product Affected:****Group 1 device list - MIHO adding RFAB as an additional Fab site:**

LP5912Q0.9DRVRQ1	TLV70032QDDCRQ1	TLV70228QDBVRQ1	TPS560200QDGKTQ1
LP5912Q1.1DRVRQ1	TLV70033QDDCRQ1	TLV70228QDDCRQ1	TPS62130AQRGTRQ1
LP5912Q1.2DRVRQ1	TLV70033QDDCRRB	TLV70228QDSERQ1	TPS62130AQRGTTQ1
LP5912Q1.5DRVRQ1	TLV702125QDBVRQ1	TLV70229QDBVRQ1	TPS62133AQRGTRQ1
LP5912Q1.8DRVRQ1	TLV70212QDBVRQ1	TLV70229QDSERQ1	TPS62133AQRGTTQ1
LP5912Q2.8DRVRQ1	TLV70212QDSERQ1	TLV70230QDBVRQ1	TPS62150AQRGTRQ1
LP5912Q3.0DRVRQ1	TLV70213QDSERQ1	TLV70230QDSERQ1	TPS62150AQRGTTQ1
LP5912Q3.3DRVRQ1	TLV70215QDBVRQ1	TLV70231QDSERQ1	TPS62152AQRGTRQ1
TLV70012QDDCRQ1	TLV70215QDSERQ1	TLV70232QDSERQ1	TPS62153AQRGTRQ1
TLV70018QDDCRQ1	TLV70218QDBVRQ1	TLV70233QDBVRQ1	TPS62153AQRGTTQ1
TLV70018QDDCRRB	TLV70218QDSERQ1	TLV70233QDSERQ1	UCC27511AQDBVRQ1
TLV70025QDDCRQ1	TLV70225QDSERQ1	TLV70236QDSERQ1	UCC27531QDBVRQ1
TLV70028QDDCRQ1	TLV70227QDBVRQ1	TLV70245QDSERQ1	UCC27532QDBVRQ1
TLV70028QDDCRRB	TLV70227QDSERQ1	TPS560200QDGKRQ1	

**Group 2 device list - MIHO adding RFAB and SCTF & CLARK-PR Probe site:**

TPS62160QDSGRQ1	TPS62162QDSGRQ1	TPS62170QDSGRQ1	TPS62172QDSGRQ1
TPS62160QDSGTQ1	TPS62162QDSGTQ1	TPS62170QDSGTQ1	TPS62172QDSGTQ1

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

**Approved 12-Nov-2021**

**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: UCC28781QRTW	QBS Process Reference: TLC6C5712QPWPRQ1	QBS Package Reference: OPA1679QRUMRQ1
<b>Test Group A – Accelerated Environment Stress Tests</b>									
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	Level 2	No Fails	-	No Fails
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	Level 3	-	No Fails	-
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST, 130C/85%RH	96 Hours	1/77/0	3/231/0	3/231/0
uHAST	A3	JEDEC JESD22-A102	3	77	Unbiased HAST 130C/85%RH	96 Hours	-	-	3/231/0
AC	A3	JEDEC JESD22-A102	3	77	Autoclave 121C	96 Hours	1/77/0	3/231/0	-
TC	A4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle, - 65/150C	500 Cycles	1/77/0	3/231/0	3/231/0
TC-WBP	A4	MIL-STD883 Method 2011	1	30	Auto Post TC Bond Pull	30 ball bonds, min. 5 units	1/50/0	1/5/0	1/30/0
PTC	A5	JEDEC JESD22-A105	1	45	Power Temperature Cycle	1000 Cycles	N/A	N/A	N/A
HTSL	A6	JEDEC JESD22-A103	1	45	High Temp Storage Bake 150C	1000 Hours	1/77/0	-	-
HTSL	A6	JEDEC JESD22-A103	1	45	High Temp Storage Bake 175C	500 Hours	-	1/45/0	1/45/0
<b>Test Group B – Accelerated Lifetime Simulation Tests</b>									
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test, 135C	408 Hours	-	-	3/231/0

Type	#	Test Spec	Min Lot Qty	SS/Lot	Test Name / Condition	Duration	Qual Device: UCC28781QRTW	QBS Process Reference: TLC6C5712QPWPRQ1	QBS Package Reference: OPA1679QRUMRQ1
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test, 140C	1000 Hours	1/77/0	-	-
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test, 150C	408 Hours	-	3/231/0	-
ELFR	B2	AEC Q100-008	3	800	Early Life Failure Rate, 150C	24 Hours	-	3/2400/0	-
EDR	B3	AEC Q100-005	3	77	NVM Endurance, Data Retention, and Operational Life	-	N/A	N/A	N/A
<b>Test Group C – Package Assembly Integrity Tests</b>									
WBS	C1	AEC Q100-001	1	30	Auto Wire Bond Shear	Cpk > 1.67	3/90/0	-	3/90/0
WBP	C2	MIL-STD883 Method 2011	1	30	Auto Wire Bond Pull	Cpk > 1.67	3/90/0	-	3/90/0
SD	C3	JEDEC JESD22-B102	1	15	Surface Mount Solderability >95% Lead Coverage	Pb Free	1/15/0	-	1/15/0
SD	C3	JEDEC JESD22-B102	1	15	Surface Mount Solderability >95% Lead Coverage	Pb	1/15/0	-	1/15/0
PD	C4	JEDEC JESD22-B100 and B108	3	10	Auto Physical Dimensions	Cpk>1.67	3/90/0	-	3/30/0
<b>Test Group D – Die Fabrication Reliability Tests</b>									
EM	D1	JESD61	-	-	Electromigration	-	Completed Per Process Technology Requirements	-	-
Tddb	D2	JESD35	-	-	Time Dependant Dielectric Breakdown	-	Completed Per Process Technology Requirements	-	-
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	-	-
<b>Test Group E – Electrical Verification Tests</b>									
HBM	E2	AEC Q100-002	1	3	ESD - HBM - Q100	2000 V	1/3/0	1/3/0	1/3/0

Type	#	Test Spec	Min Lot Qty	SS/Lot	Test Name / Condition	Duration	Qual Device: UCC28781QRTW	QBS Process Reference: TLC6C5712QPWPRQ1	QBS Package Reference: OPA1679QRUMRQ1
CDM	E3	AEC Q100-011	1	3	ESD - CDM - Q100	1000 V	1/3/0	1/3/0	1/3/0
LU	E4	AEC Q100-004	1	6	Latch-up	AEC-Q100-004	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	1/90/0	3/90/0

- QBS: Qual By Similarity  
- Qual Device UCC28781QRTW is qualified at LEVEL2-260CG

**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

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

Approved 01/19/2015

## 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: TPS65263QRHBRQ1	QBS Process: TPS652510QRHARQ1	QBS Process: TPS2543QRTE	QBS Package: TP555340QRTETQ1
Test Group A - Accelerated Environment Stress Test										
PC	A1	JESD22-113	-	-	Automotive Preconditioning	Level 2-260C	-	-	3/765/0	-
PC	A1	JESD22-113	-	-	Preconditioning	Level 3-260C	-	1/200/0	-	-
HAST	A2	JESD22-A110	3	77	Biased HAST, 130C/85%RH	96 Hours	1/77/0	3/231/0	3/231/0	1/77/0
AC	A3	JESD22-A102	3	77	Autoclave 121C	96 Hours	1/77/0	3/231/0	3/237/0	1/77/0
TC	A4	JESD22-A104	3	77	Post Temp. Cycle Bond Shear	Wires	-	-	1/5/0	-
TC	A4	JESD22-A104	3	77	Temperature Cycle, -65/150C	500 Cycles	1/77/0	3/231/0	3/231/0	1/77/0
TC-BP	A4	MIL-STD883 Method 2011	1	30	Post Temp. Cycle Bond Pull	Wires	1/5/0	1/5/0	1/5/0	1/5/0
PTC	A5	JESD22-A105	1	45	Power Temperature Cycle, -40/125C	1000 Cycles	1/50/0	1/50/0	1/50/0	1/50/0
HTSL	A6	JESD22-A103	1	45	High Temp. Storage Bake, 150C	1000 Hours	1/45/0	-	-	1/50/0
HTSL	A6	JESD22-A103	1	45	High Temp. Storage Bake, 175C	500 Hours	-	1/50/0	3/149/0	-
Test Group B - Accelerated Lifetime Simulation Test										
HTOL	B1	JESD22-A108	3	77	Life Test, 125C	1000 Hours	1/77/0	-	-	1/77/0
HTOL	B1	JESD22-A108	3	77	Life Test, 150C	408 Hours	-	1/77/0	3/231/0	-
ELFR	B2	AEC-Q100-008	3	800	Early Life Failure Rate, 125C	48 Hours	-	3/2400/0	-	-
ELFR	B2	AEC-Q100-008	3	800	Early Life Failure Rate, 150C	24 Hours	-	-	3/2640/0	-
EDR	B3	AEC-Q100-005	3	77	NVM Endurance, Data Retention, and Operational Life	-	N/A	-	-	-
Test Group C - Package Assembly Integrity Tests										
WBS	C1	AEC-Q100-001	1	30	Bond Shear	(Ppk>1.67 and Cpk>1.33)	1/76/0	1/76/0	-	-
WBP	C2	MIL-STD883 Method 2011	1	30	Bond Pull (Ppk>1.67 and Cpk>1.33)	Wires	1/76/0	1/76/0	-	-
SD	C3	JESD22-B102	1	15	Surface Mount Solderability	Pb	1/15/0	1/44/0	-	-
SD	C3	JESD22-B102	1	15	Surface Mount Solderability	Pb Free	1/15/0	1/44/0	2/30/0	-
PD	C4	JESD22 B100 and B108	3	10	Physical Dimensions	(Ppk>1.67 and Cpk>1.33)	1/10/0	3/90/0	3/90/0	1/10/0
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	-	-	-
HCI	D3	JESD60 & 28	-	-	Hot Injection Carrier	-	Completed Per Process Technology Requirements	-	-	-
NBTI	D4	-	-	-	Negative Bias Temperature Instability	-	Completed Per Process Technology Requirements	-	-	-
SM	D6	-	-	-	Stress Migration	-	Completed Per Process Technology Requirements	-	-	-
Test Group E - Electrical Verification										
HBM	E2	AEC-Q100-002	1	3	ESD - HBM	4000 V	1/3/0	-	1/3/0	-
CDM	E3	AEC-Q100-011	1	3	ESD - CDM	1500 V	1/3/0	-	1/3/0	-
LU	E4	AEC-Q100-004	1	6	Latch-up	(Per AEC Q100-004)	1/6/0	1/6/0	1/6/0	-
ED	E5	AEC-Q100-009	3	30	Electrical Distributions (Cpk>1.67, Ppk>1.67) Room, hot, and cold test	--	3/90/0	3/90/0	3/90/0	1/30/0

- QBS: Qual By Similarity  
Qual Device TPS65263QRHBRQ1 is qualified at LEVEL2-260C  
A1 (PC): Preconditioning:  
Performed for THB, Biased HAST, AC, uHAST & TC samples, as applicable.

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

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

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

Approved 05/27/2015

## 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: TLV713xxPQDBVQ1	QBS Process: TPS2543QRT	QBS Package: UCC27519AQDBVRQ1	QBS Package: TP570933QDBVRQ1	QBS Package: TP573201QDBVRQ1	QBS Package: OPA356AQDBVRQ1
<b>Test Group A - Accelerated Environment Stress Test</b>												
PC	A1	JESD22-113	-	-	Automotive Preconditioning	Level-1, 260C	4/308/0	-	1/77/0	1/77/0	3/1198/0	-
PC	A1	JESD22-113	-	-	Automotive Preconditioning	Level-2, 260C	-	3/765/0	-	-	-	2/601/0
HAST	A2	JESD22-A110	3	77	Biased HAST 130C/85%RH	96 Hours	1/77/0	3/231/0	1/77/0	1/77/0	3/231/0	-
AC	A3	JESD22-A102	3	77	Auto Autoclave 121C	96 Hours	1/77/0	3/231/0	1/77/0	1/77/0	3/231/0	2/154/0
uHAST	A3	JESD22-A118	3	77	Unbiased HAST 130C/85%RH	96 Hours	-	-	-	-	-	1/77/0
TC	A4	JESD22-A104	3	77	Temperature Cycle, -65/150C	500 Cycles	1/77/0	3/231/0	1/77/0	1/77/0	3/231/0	2/153/0
TC-BP	A4	JESD22-A104	3	77	Post Temp. Cycle Bond Shear	Wires	1/5/0	1/5/0	1/5/0	-	1/5/0	1/5/0
PTC	A5	JESD22-A105	1	45	Power Temperature Cycle	1000 Cycles	N/A	1/50/0	-	-	-	-
HTSL	A6	JESD22-A103	1	45	High Temp Storage Bake 175C	500 Hours	1/45/0	3/135/0	1/45/0	1/45/0	1/45/0	1/45/0
<b>Test Group B - Accelerated Lifetime Simulation Test</b>												
HTOL	B1	JESD22-A108	3	77	Life Test, 125C	1000 Hours	1/77/0	-	1/77/0	-	3/231/0	2/158/0
HTOL	B1	JESD22-A108	3	77	Life Test, 150C	408 Hours	-	3/231/0	-	1/77/0	-	-
ELFR	B2	AEC-Q100-008	3	800	Early Life Failure Rate, 125C	48 Hours	-	-	-	-	3/2396/0	2/1600/0
ELFR	B2	AEC-Q100-008	3	800	Early Life Failure Rate, 150C	24 Hours	-	3/2400/0	-	-	-	-
EDR	B3	AEC-Q100-005	3	77	NVM Endurance, Data Retention, and Operational Life	-	-	-	-	-	-	-
<b>Test Group C - Package Assembly Integrity Tests</b>												
WBS	C1	AEC-Q100-001	1	30	Post HTSL/Bond Shear	Wires	-	1/5/0	-	-	-	-
WBS	C1	AEC-Q100-001	1	30	Wire Bond Shear (Cpk>1.67)	-	1/30/0	1/30/0	-	-	-	-
WBP	C2	MIL-STD883 Method 2011	1	30	Bond Pull	Post T/C	1/5/0	1/5/0	-	1/6/0	-	-
WBP	C2	MIL-STD883 Method 2011	1	30	Post HTSL/Bond Pull	Wires	-	1/5/0	-	-	-	-
WBP	C2	MIL-STD883 Method 2011	1	30	Wire Bond Pull (Cpk>1.67)	-	1/30/0	1/30/0	-	-	-	-
SD	C3	JESD22-B102	1	15	Surface Mount Solderability	Pb Free	1/15/0	1/15/0	1/15/0	1/15/0	1/15/0	1/15/0
PD	C4	JESD22 B100 and B108	3	10	Physical Dimensions (Cpk>1.67)	-	1/10/0	3/30/0	-	-	3/30/0	-
SBS	C5	AEC-Q100-010	3	50	Solder Ball Shear (Cpk>1.67)	Solder Balls	N/A	-	-	-	-	-
SBS	C5	AEC-Q100-010	3	50	Solder Ball Shear (Cpk>1.67)	Post HTSL/Bump	N/A	-	-	-	-	-
SBS	C5	AEC-Q100-010	3	50	Solder Ball Shear (Cpk>1.67)	Post 500 Temp Cyc/Bump	N/A	-	-	-	-	-
LI	C6	JESD22-B105	1	50	Lead Integrity	-	N/A	-	-	-	-	-
<b>Test Group D - Die Fabrication Reliability Tests</b>												
EM	D1	JESD61	-	-	Electromigration	-	Completed Per Process Technology Requirements	-	-	-	-	-
TDD	D2	JESD35	-	-	Time Dependant Dielectric Breakdown	-	Completed Per Process Technology Requirements	-	-	-	-	-
HCI	D3	JESD60 & 28	-	-	Hot Injection Carrier	-	Completed Per Process Technology Requirements	-	-	-	-	-
NBTI	D4	-	-	-	Negative Bias Temperature Instability	-	Completed Per Process Technology Requirements	-	-	-	-	-
SM	D6	-	-	-	Stress Migration	-	Completed Per Process Technology Requirements	-	-	-	-	-
<b>Test Group E - Electrical Verification</b>												
HBM	E2	AEC-Q100-002	1	3	ESD - HBM	4000 V	1/3/0	1/3/0	-	-	-	-
CDM	E3	AEC-Q100-011	1	3	ESD - CDM	1000 V	1/3/0	1/3/0	1/3/0	-	-	1/3/0
LU	E4	AEC-Q100-004	1	6	Latch-up	(Per AEC Q100-004)	1/6/0	1/6/0	1/6/0	1/6/0	-	1/6/0
ED	E5	AEC-Q100-009	3	30	Electrical Distributions	Cpk>1.67 Room, hot, and cold test	3/90/0	3/90/0	3/90/0	1/30/0	3/Pass	1/90/0

- QBS: Qual By Similarity  
- Qual Devices qualified at LEVEL-1:260C: TLV71312PQDBVQ1, TLV71312SPQDBVQ1, TLV71318PQDBVQ1, TLV71333PQDBVQ1, TLV71310PQDBVQ1

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

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

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

Affected ZVEI IDs: SEM-PW-02, SEM-PW-13, SEM-TF-01

For questions regarding this notice, e-mails can be sent to the contact below or your local Field Sales Representative.

Location	E-Mail
WW Change Management Team	<a href="mailto:PCN_ww_admin_team@list.ti.com">PCN_ww_admin_team@list.ti.com</a>

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