12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20210416002.1
Qualification of alternate BOM items for Select Devices
Change Notification / Sample Request

Date: May 03, 2021
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.

PCN Team
SC Business Services

20210416002.1
Change Notification / Sample Request
Attachments

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 twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
LM95234CISD/NOPB	null
LM92CIM/NOPB	null
LM70CIMM-3/NOPB	null
ISO7742DWR	null
ISO7842DW	null
ISO7763FDWR	null
ISO7742FDW	null
ISO7731DWR	null
UCC5390ECDWVR	null
LM75BIM-3/NOPB	null
LM77CIM-3/NOPB	null
LM75BIMX-3/NOPB	null
ISO7741DWR	null
ISO7742DW	null
ISO7842DWR	null
ISO7760DW	null
ISO7841DWR	null
ISO7841DW	null
ISO7740FDW	null
LM75BIMM-3/NOPB	null
LM70CIMM-5/NOPB	null
LM95233CISD/NOPB	null
ISO7760FDWR	null
ISO7740DWR	null
LM57CISD-5/NOPB	null
LM75BIMX-5/NOPB	null
LM75BIMM-5/NOPB	null
ISO7740DW	null
ISO7741FDWR	null
ISO7731BDWR	null
LM95214CISD/NOPB	null
LM57BISD-5/NOPB	null
ISO7740FDWR	null
ISO7731DW	null
UCC5350SBDR	null
LM74CIMX-3/NOPB	null
LM57BISDX-10/NOPB	null
LM95213CISD/NOPB	null
ISO7821LLDW	null
ISO7820LLDW	null
LM74CIM-3/NOPB	null
LM70CIMMX-3/NOPB	null
LM96194CISQX/NOPB	null
ISO7741FDW	null
UCC5350MCDR	null
UCC5320SCDWVR	null
ISO7730DWR	null
ISO7821LLSDWR	null

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

PCN Number:	20210416002.1	**PCN Date:**	May 5, 2021
Title:	Qualification of alternate BOM items for select devices		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	Aug. 5, 2021	**Estimated Sample Availability:**	Date provided at sample request

Change Type:

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

PCN Details

Description of Change:

This PCN is to inform of an alternative BOM items for the devices in the product affected section as follows:

Group 1 change description

Current Bond wire process & Diameter	Additional Bond wire process & diameter
All bond wires - Au, 0.96 mils	Inter die - Au, 0.96 mils, Die to Leadframe – Cu, 1.0 mils

Group 2 change description

Current Bond wire/diameter – die to lead	Additional Bond wire process & diameter – die to lead
Au/0.96 mils	Cu/1.0 mils

Group 3 change description

	Current	Additional bond wire, diameter
Bond Wire, diameter	Au, 0.8 mils	Cu, 0.8 mils
Mold Compound	4208625 or SID#445161	4222198

Group 4 change description

Current Bond wire, Diameter	Additional Bond wire, diameter
Au, 1 mil	Cu, 0.96 mil

Group 5 change description

Current Bond wire, Diameter	Additional Bond wire, diameter
Au, 0.9 mil	Cu, 0.96 mil

Group 6 change description

Current Bond wire, Diameter	Additional Bond wire, diameter
Au, 1 mil	Cu, 0.8 mil

Reason for Change:

Continuity of supply.

1) To align with world technology trends and use wiring with enhanced mechanical and electrical properties
2) Maximize flexibility within our Assembly/Test production sites.
3) Cu is easier to obtain and stock

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

None

Anticipated impact on Material Declaration

☐	No Impact to the Material Declaration	☒	Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained at the site link below http://www.ti.com/quality/docs/materialcontentsearch.tsp

Changes to product identification resulting from this PCN:

None

Product Affected:

Group 1 Device list:

SN21220ADR	UCC21540ADWR	UCC5310MCD	UCC5350MCDR
SN21220DR	UCC21540DW	UCC5310MCDR	UCC5350MCDWV
UCC21220AD	UCC21540DWK	UCC5310MCDWV	UCC5350MCDWVR
UCC21220ADR	UCC21540DWKR	UCC5310MCDWVR	UCC5350SBD
UCC21220D	UCC21540DWR	UCC5320ECD	UCC5350SBDR
UCC21220DR	UCC21541DW	UCC5320ECDR	UCC5390ECD
UCC21222D	UCC21541DWR	UCC5320SCD	UCC5390ECDR
UCC21222DR	UCC21542ADWKR	UCC5320SCDR	UCC5390ECDWV
UCC21530DWK	UCC21542DWKR	UCC5320SCDWV	UCC5390ECDWVR
UCC21530DWKR	UCC21542DWR	UCC5320SCDWVR	UCC5390SCD
UCC21540ADWK	UCC5304DWV	UCC5350MCD	UCC5390SCDR
UCC21540ADWKR	UCC5304DWVR		

Group 2 Device list:

ISO7730DW	ISO7741DW	ISO7762DW	ISO7831DW
ISO7730DWR	ISO7741DWR	ISO7762DWR	ISO7831DWR
ISO7730FDW	ISO7741FBDW	ISO7762FDW	ISO7831FDW
ISO7730FDWR	ISO7741FBDWR	ISO7762FDWR	ISO7831FDWR
ISO7731BDW	ISO7741FDW	ISO7763DW	ISO7840DW
ISO7731BDWR	ISO7741FDWR	ISO7763DWR	ISO7840DWR
ISO7731DW	ISO7742DW	ISO7763FDW	ISO7840FDW
ISO7731DWR	ISO7742DWR	ISO7763FDWR	ISO7840FDWR
ISO7731FBDW	ISO7742FDW	ISO7820LLDW	ISO7841DW
ISO7731FBDWR	ISO7742FDWR	ISO7820LLDWR	ISO7841DWR
ISO7731FDW	ISO7760DW	ISO7821LLDW	ISO7841FDW
ISO7731FDWR	ISO7760DWR	ISO7821LLDWR	ISO7841FDWR

ISO7740DW	ISO7760FDW	ISO7821LLSDW	ISO7842DW
ISO7740DWR	ISO7760FDWR	ISO7821LLSDWR	ISO7842DWR
ISO7740FDW	ISO7761DW	ISO7830DW	ISO7842FDW
ISO7740FDWR	ISO7761DWR	ISO7830DWR	ISO7842FDWR
ISO7741BDW	ISO7761FDW	ISO7830FDW	SN1506011DW
ISO7741BDWR	ISO7761FDWR	ISO7830FDWR	SN1506011DWR

Group 3 Device list:

TPS23880RTQR	TPS23881ARTQT	TPS23882RTQR	TPS2388RTQR
TPS23880RTQT	TPS23881RTQR	TPS23882RTQT	TPS2388RTQT
TPS23881ARTQR	TPS23881RTQT		

Group 4 Device list:

LM70CIMM-3	LM70CIMMX-3/NOPB	LM75BIMM-5/NOPB	LM77CIMM-3/NOPB
LM70CIMM-3/NOPB	LM70CIMMX-5/NOPB	LM75BIMMX-3/NOPB	LM77CIMM-5/NOPB
LM70CIMM-5	LM75BIMM-3	LM75BIMMX-5/NOPB	LM77CIMMX-3/NOPB
LM70CIMM-5/NOPB	LM75BIMM-3/NOPB		

Group 5 Device list:

LM74CIM-3	LM74CIMX-5/S7001825	LM75BIMX-5	LM77CIM-5/NOPB
LM74CIM-3/NOPB	LM75BIM-3	LM75BIMX-5/NOPB	LM77CIMX-3/NOPB
LM74CIM-5	LM75BIM-3/NOPB	LM76CHM-5	LM77CIMX-5/NOPB
LM74CIM-5/NOPB	LM75BIM-5	LM76CHM-5/NOPB	LM92CIM
LM74CIMX-3	LM75BIM-5/NOPB	LM76CHMX-5/NOPB	LM92CIM/NOPB
LM74CIMX-3/NOPB	LM75BIMX-3	LM77CIM-3	LM92CIMX/NOPB
LM74CIMX-5/NOPB	LM75BIMX-3/NOPB	LM77CIM-3/NOPB	

Group 6 Device list:

LM26LVCISD-050/NOPB	LM26LVCISD-115/NOPB	LM57BISDX-10/NOPB	LM95233CISD
LM26LVCISD-060/NOPB	LM26LVCISD-120/NOPB	LM57BISDX-5/NOPB	LM95233CISD/NOPB
LM26LVCISD-065/NOPB	LM26LVCISD-125/NOPB	LM57CISD-10/NOPB	LM95233CISDX/NOPB
LM26LVCISD-070/NOPB	LM26LVCISD-135/NOPB	LM57CISD-5/NOPB	LM95234CISD/NOPB
LM26LVCISD-075/NOPB	LM26LVCISD-140/NOPB	LM57CISDX-10/J7002636	LM95234CISDX/NOPB
LM26LVCISD-080/NOPB	LM26LVCISD-145/NOPB	LM57CISDX-10/NOPB	LM96063CISD/NOPB
LM26LVCISD-085/NOPB	LM26LVCISD-150/NOPB	LM57CISDX-5/NOPB	LM96063CISDX/NOPB
LM26LVCISD-090/NOPB	LM26LVCISDX-060/NOPB	LM71CISD/NOPB	LM96163CISD/NOPB
LM26LVCISD-095/NOPB	LM26LVCISDX-120/NOPB	LM95213CISD/NOPB	LM96163CISDX/NOPB
LM26LVCISD-100/NOPB	LM57BISD-10/NOPB	LM95214CISD/NOPB	LM96194CISQ/NOPB
LM26LVCISD-105/NOPB	LM57BISD-5/NOPB	LM95214CISDX/NOPB	LM96194CISQX/NOPB
LM26LVCISD-110/NOPB			

Group 1 Qual Memo:

TI Information
Selective Disclosure

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

Type	Test Name / Condition	Duration	Qual Device: UCC21220DR	Qual Device: UCC5304DWVR	Qual Device: UCC5390ECDWVR	QBS Package Reference: UCC21520ADWR	QBS Package Reference: UCC23513DWY PG1.0	QBS Package Reference: UCC23513DWY PG2.0
AC	Autoclave 121C	96 Hours	-	-	-	3/231/0	3/231/0	1/77/0
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	1/77/0
HBM	ESD - HBM	4000 V	-	-	-	-	1/3/0	1/3/0
HTOL	Life Test, 125C	1000 Hours	-	-	-	1/77/0	3/231/0	1/77/0
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	-	3/231/0	3/231/0	-
LU	Latch-up	(per JESD78)	-	-	-	-	1/6/0	1/6/0
TC	Temperature Cycle, -65/150C	500 Cycles	1/77/0	1/77/0	-	3/231/0	3/231/0	1/77/0
WBS	Wire Bond Shear	76 Wires	Pass	Pass	Pass	-	-	-
WBP	Wire Bond Pull	76 Wires	Pass	Pass	Pass	-	-	-

- 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

Group 2 Qual Memo:

TI Information
Selective Disclosure

Approve Date 22-Feb-2021

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

Type	Test Name / Condition	Duration	Qual Device: ISO7763DW	Qual Device: ISO7841FDW	QBS Package Reference: UCC21520ADWR	QBS Package Reference: ISO7741FQDWQ1
AC	Autoclave 121C	96 Hours	1/77/0	1/77/0	3/231/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	3/231/0	-
HTOL	Life Test, 125C	1000 Hours	-	-	1/77/0	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	3/231/0	-
TC	Temperature Cycle, -65/150C	500 Cycles	1/77/0	1/77/0	3/231/0	-
WBP	Bond Pull	Wires	1/76/0	1/76/0	-	-
WBS	Ball Bond Shear	Wires	1/76/0	1/76/0	-	-

- QBS: Qual By Similarity
- Qual Devices ISO7841FDW and ISO7763DW are qualified at LEVEL2-260C
- Devices ISO7763DW and ISO7841FDW contain multiple dies.
- 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

Group 3 Qual Memo:

TI Information
Selective Disclosure

Qualification Report
Approve Date 04-Mar-2021

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

Type	Test Name / Condition	Duration	Qual Device: TPS23881ARTQ / TPS23881RTQ	QBS Product Reference: TPS23881ARTQ / TPS23881RTQ	QBS Product Reference: TPS2388RTQ	QBS Product Reference: TPS2388RTQ	QBS Process Reference: SN96019PFP	QBS Package Reference: ADS8548SRGCR	QBS Package Reference: TMP461AIRUN	QBS Package Reference: TPS51217DSCR
ACLV	Autoclave 121C	96 Hours	3/231/0	-	-	-	3/240/0	3/231/0	-	3/231/0
ED	Electrical Characterization	Per Datasheet Parameters	3/Pass	Pass	Pass	Pass	Pass	-	Pass	-
CDM	ESD - CDM	1500 V	-	1/3/0	1/3/0	1/3/0	3/9/0	-	-	-
HBM	ESD - HBM	2500 V	-	1/3/0	-	1/3/0	-	-	1/3/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0	-	1/77/0	-	3/240/0	3/231/0	-	-
HAST	Biased HAST, 130C/85%RH	192 Hours	3/231/0	-	-	-	-	-	-	-
HTOL	Life Test, 145C	400 Hours	-	-	1/77/0	1/77/0	-	-	-	-
HTOL	Life Test, 125C	1000 Hours	-	-	-	-	3/239/0	-	-	-
HTOL	Life Test, 150C	300 Hours	-	-	-	-	-	-	-	3/231/0
HTSL	High Temp Storage Bake 150C	1000 Hours	3/231/0	-	-	-	-	-	-	-
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	1/77/0	-	3/240/0	3/231/0	-	3/231/0
LU	Latch-up	(per JESD78)	-	1/6/0	1/6/0	1/6/0	1/6/0	-	1/6/0	-
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	-	1/77/0	1/77/0	3/231/0	3/231/0	3/231/0	3/231/0
TPI	Thermal Path Integrity (Cu Wire)	(per the appropriate pkg level)	1/12/0	-	-	-	-	-	-	-
UHAST	Unbiased HAST 130C/85%RH	96 Hours	-	-	1/77/0	-	-	-	3/231/0	-
MQ	Manufacturability (Assembly)	(per mfg. Site	3/Pass	-	-	-	-	-	-	-

Type	Test Name / Condition	Duration	Qual Device: TPS23881ARTQ / TPS23881RTQ	QBS Product Reference: TPS23881ARTQ / TPS23881RTQ	QBS Product Reference: TPS2388RTQ	QBS Product Reference: TPS2388RTQ	QBS Process Reference: SN96019PFP	QBS Package Reference: ADS8548SRGCR	QBS Package Reference: TMP461AIRUN	QBS Package Reference: TPS51217DSCR
		specification)								
BPS	Wire Pull	30 wires minimum of 5 units	3/90/0	-	-	-	-	-	-	-
BPS	Bond Shear	30 wires minimum of 5 units	3/90/0	-	-	-	-	-	-	-
YLD	FTY and BIN Analysis	3/90/0	4/Pass (A)	Pass	Pass	Pass	-	-	-	-

- QBS: Qual By Similarity
- Qual Device TPS23881RTQ and TPS23881ARTQ are qualified at LEVEL3-260C

Note:
A – FTY and Bin Analysis were performed on 4 products - TPS23880RTQ, TPS23881ARTQ, TPS23881RTQ, TPS2388RTQ

- 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

Group 4 Qual Memo:

TI Information
Selective Disclosure

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: LMV852MMX	Qual Device: LMC6482IMM
PC	PreCon Level 1	Level 1-260C	3/462/0	3/462/0
HAST	Biased HAST, 130C/85%RH	96/hrs. @130C	-	-
AC	Autoclave 121C	96HRS	3/231/0	3/231/0
TC	Temperature Cycle, -65/150C	TMCL500X	3/231/0	3/231/0
HTSL	High Temp Storage Bake 150C	1000 hrs. @150C	-	-
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass
DPA	Destructive Physical Analysis Post 500 Temp Cycle	x-section and de process to examine assembly robustness, Check for stich bond and bond pad integrity	3/15/0	3/15/0
YLD	FTY and Bin Summary	Compare against baseline	Pass	Pass

- 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

Group 5 Qual Memo:

TEXAS INSTRUMENTS

TI Information
Selective Disclosure

Approved on 11-Nov-2013

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: DS90CP22MXA1CL	Qual Device: LMV324MX	Qual Device: LP2995MXNOPB	Qual Device: LMC6482AIM/NOPB
PC	PreCon Level 1	Level 1-260C	3/462/0	-	3/462/0	3/693/0
HAST	Biased HAST, 130C/85%RH	96/hrs. @130C	-	-	-	3/231/0
AC	Autoclave 121C	96HRS	3/231/0	-	3/231/0	3/231/0
TC	Temperature Cycle, -65/150C	TMCL500X	3/231/0	-	3/231/0	3/231/0
HTSL	High Temp Storage Bake 150C	1000 hrs. @150C	-	-	-	1/77/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	-	Pass	Pass	Pass
DPA	Destructive Physical Analysis Post 500 Temp Cycle	x-section and de process to examine assembly robustness, Check for stich bond and bond pad integrity	3/15/0	-	3/15/0	3/15/0
YLD	FTY and Bin Summary	Compare against baseline	-	Pass	Pass	Pass

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable
- 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

Group 6 Qual Memo:

Approved on 23-Sep-2014

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: DP83848TSQ	Qual Device: DS91M040TSQAW	Qual Device: DS100DX410EL16	Qual Device: DS80PCI402A2TT	Qual Device: LMH0366SQENOPB	Qual Device: LMH0394SQ/NOPB
PC	PreCon Level 1	Level 1-260C					3/720/0	
PC	PreCon Level 2	Level 2-260C	3/1079/0		-	3/720/0	-	-
PC	PreCon Level 3	Level 3-260C	-	1/255/0	3/720/0	-	-	3/231/0
HAST	Biased HAST, 130C/85%RH	96/hrs. @130C	-	-	-	-	-	3/231/0
AC	Autoclave 121C	96HRS	3/231/0	1/77/0	3/231/0	3/231/0	3/231/0	-
UHAST	Unbiased HAST 130C/85%RH	unHAST-96 HRS/-	3/231/0	1/77/0	3/231/0	3/231/0	3/231/0	-
TC	Temperature Cycle, -65/150C	TMCL500X	3/231/0	1/77/0	3/231/0	3/231/0	3/231/0	-
HTSL	High Temp Storage Bake 170C	420 hrs. @170C	3/231/0	-	-	3/231/0	-	-
ED	Side By Side Electrical Characterization.	Per Datasheet Parameters	1/30/0	1/30/0	1/30/0	1/30/0	1/30/0	-
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass	Pass	Pass	Pass
MSL	Thermal Path Integrity	Level 2-260C	3/30/0	1/22/0	3/66/0	3/66/0	3/66/0	-
DPA	Destructive Physical Analysis Post 500 Temp Cycle	x-section and de process to examine assembly robustness, Check for stich bond and bond pad integrity	3/3/0	-	3/15/0	3/15/0	3/15/0	1/5/0 Post 96 hours HAST
YLD	FTY and Bin Summary	Compare against baseline	Pass	Pass	Pass	Pass	Pass	Pass

- QBS: Qual By Similarity
- Qual Device DS100DX410EL16 is qualified at LEVEL3-260C
- Qual Device DS80PCI402A2TT is qualified at LEVEL2-260C
- Qual Device LMH0366SQENOPB is qualified at LEVEL1-260C
- Qual Device LMH0394SQ/NOPB is qualified at -
- Qual Device LMH0394SQ/NOPB REV A is qualified at LEVEL3-260C

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable
- 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/

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

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