

PCN Number:	20230327007.1	PCN Date:	March 30, 2023
Title:	Qualification of new Fab site (RFAB) using qualified Process Technology, Die Revision, Datasheet and additional Assembly site/BOM options for select devices		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	Jun 30, 2023	Sample requests accepted until:	Apr 30, 2023*

***Sample requests received after April 30, 2023 will not be supported.**

Change Type:

<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input checked="" type="checkbox"/>	Assembly Materials
<input checked="" type="checkbox"/>	Design	<input checked="" type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification
<input type="checkbox"/>	Test Site	<input checked="" type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material	<input type="checkbox"/>	Wafer Bump Process
<input checked="" type="checkbox"/>	Wafer Fab Site	<input checked="" type="checkbox"/>	Wafer Fab Materials	<input checked="" type="checkbox"/>	Wafer Fab Process
		<input type="checkbox"/>	Part number change		

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of a new fab & process technology (RFAB, LBC7) and HFTF and TI Malaysia as additional Assembly sites for selected devices listed below in the product affected section.

Current Fab Site			Additional Fab Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
DL-LIN	LBC3S	150 mm	RFAB	LBC7	300 mm
DL-LIN	LBC3S	200 mm			

The die was also changed as a result of the process change.

Assembly BOM options are noted below:

	FMX	MLA	TAI	UTL2	HFTFAT	MLA (new)
Mold Compound	4211880	4211880	4211880	SID#CZ0094	SID#R-30	4211880
Bond wire composition, diameter	Cu, 0.96	Cu, 0.8 or Au, 0.96 mil	Cu, 0.96	Au, 1.0 mil	Cu, 1.0 mil	Cu, 0.96
Mount Compound	4147858	4147858	4147858	SID#PZ0013	SID#A-18	4147858
Lead finish	NiPdAu	NiPdAu	NiPdAu	NiPdAu	Matte Sn	NiPdAu

Upon expiry of this PCN TI will combine lead free solutions in a single **standard part number**. For example; **SN65HVD3086EDR** – can ship with both Matte Sn and NiPdAu/Ag.

Example:

- Customer order for 7500 units of SN65HVD3086EDR with 2500 units SPQ (Standard Pack Quantity per Reel).
- TI can satisfy the above order in one of the following ways.
 - I. 3 Reels of NiPdAu finish.
 - II. 3 Reels of Matte Sn finish
 - III. 2 Reels of Matte Sn and 1 reel of NiPdAu finish.
 - IV. 2 Reels of NiPdAu and 1 reel of Matte Sn finish.

The datasheet will be changing as a result of the above mentioned changes. The datasheet change details can be reviewed in the datasheet revision history. The links to the revised datasheets are available in the table below.

Changes from Revision E (August 2009) to Revision F (March 2023)	Page
• Deleted the <i>Ordering Information</i> table.....	1
• Added the <i>Thermal Information</i> table.....	4
• Changed the <i>Typical Characteristics</i>	9

Changes from Revision D (March 2015) to Revision E (February 2023)	Page
• Changed the <i>Thermal Information</i> table.....	4
• Changed the <i>Typical Characteristics</i>	7

Changes from Revision E (October 2009) to Revision F (March 2023)	Page
• Changed the <i>Thermal Characteristics</i> table.....	11
• Changed the <i>Typical Characteristics</i>	12

Changes from Revision E (November 2012) to Revision F (March 2023)	Page
• Deleted the <i>Ordering Information</i> table.....	1
• Added the <i>Device Information</i> table.....	1
• Added the <i>Thermal Information</i> table.....	4
• Changed the <i>Typical Characteristics</i>	7

Product Folder	Current Datasheet Number	New Datasheet Number	Link to full datasheet
SN65HVD0x, SN75HVD0x	SLLS533E	SLLS533F	http://www.ti.com/product/SN65HVD05
SNx5HVD08	SLLS550D	SLLS550E	http://www.ti.com/product/SN65HVD08
SN65HVD5x	SLLS666E	SLLS666F	http://www.ti.com/product/SN65HVD50
SN65HVD308xE	SLLS771E	SLLS771F	http://www.ti.com/product/SN65HVD3080E

Tube and temperature variants of the devices are included in EOL notice PDN# 20230327009.3.

Qual details are provided in the Qual Data Section.

Reason for Change:

These changes are part of our multiyear plan to transition products from our 150- millimeter factories to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and 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
<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> 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
DL-LIN	DLN	USA	Dallas
RFAB	RFB	USA	Richardson

Die Rev:

Current

New

Die Rev [2P]	Die Rev [2P]
A	B

Assembly Site Information:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
FMX	MEX	MEX	Aguascalientes
MLA	MLA	MYS	Kuala Lumpur
TAI	TAI	TWN	Chung Ho, New Taipei City
UTL2	NS2	THA	Bangpakong, Chachoengsao
HFTF	HFT	CHN	Hefei

Sample product shipping label (not actual product label)

TEXAS INSTRUMENTS
 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)T0:1750

(1P) SN74LS07NSR
 (Q) 2000 (D) 0336
 (31T) LOT: 3959047MLA
 (4W) TKY (1T) 7523483SI2
 (P)
 (2P) REV: (V) 0033317
 (20L) ~~SSO: SHE~~ (21L) ~~CCO: USA~~
 (22L) ASO: MLA (23L) ACO: MYS

Product Affected:

SN65HVD05DR	SN65HVD08DRG4	SN65HVD3086EDGSR	SN65HVD52DR
SN65HVD06DR	SN65HVD3080EDGSR	SN65HVD3086EDR	SN65HVD53DR
SN65HVD07DR	SN65HVD3083EDGSR	SN65HVD50DR	SN65HVD55DR
SN65HVD08DR			

For alternate parts with similar or improved performance, please visit the product page on TI.com

Qualification Report
Approve Date 02-MARCH -2023

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: SN65HVD05DR	QBS Reference: TCAN1044VDRQ1	QBS Reference: TCAN1044VDRQ1	QBS Reference: TPS51217DSCR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	1/77/0	2/154/0	3/231/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	1/77/0	2/154/0	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	1/77/0	2/154/0	3/231/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-	-	3/231/0
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	1/45/0	2/90/0	-
HTOL	B1	Life Test	125C	1000 Hours	-	1/77/0	2/154/0	-
HTOL	B1	Life Test	135C	635 Hours	-	-	-	3/231/0
WBS	C1	Ball Shear	76 balls, 3 units min	Wires	1/76/0	-	-	-
WBP	C2	Bond Pull	76 Wires, 3 units min	Wires	1/76/0	-	-	-
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	1/15/0	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	1/15/0	-
PD	C4	Physical Dimensions	Cpk>1.67	-	-	1/10/0	2/20/0	-
ESD	E2	ESD CDM	-	250 Volts	1/3/0	-	-	3/9/0
ESD	E2	ESD HBM	-	1000 Volts	1/3/0	-	-	3/9/0
ESD	E2	ESD HBM (Bus Pins)	-	16000 Volts	1/3/0	-	-	-
LU	E4	Latch-Up	Per JESD78	-	1/3/0	-	-	3/18/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	-	3/60/0
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	2/60/0	-	-
FTY	E6	Final Test Yield	-	-	1/1/0	-	-	-

- QBS: Qual By Similarity
- Qual Device SN65HVD05DR is qualified at MSL1 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

Qualification Report
Approve Date 03-March-2023

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: SN65HVD06DR	Qual Device: SN65HVD07DR	QBS Reference: TCAN1044VDRQ1	QBS Reference: TCAN1044VDRQ1	QBS Reference: TPS51217DSCR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	1/77/0	2/154/0	3/231/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	1/77/0	2/154/0	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	-	1/77/0	2/154/0	3/231/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-	-	-	3/231/0
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	-	1/45/0	2/90/0	-
HTOL	B1	Life Test	125C	1000 Hours	-	-	1/77/0	2/154/0	-
HTOL	B1	Life Test	135C	635 Hours	-	-	-	-	3/231/0
WBS	C1	Ball Shear	76 balls, 3 units min	Wires	1/76/0	1/76/0	-	-	-
WBP	C2	Bond Pull	76 Wires, 3 units min	Wires	1/76/0	1/76/0	-	-	-
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	-	1/15/0	-

SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	-	1/15/0	-
PD	C4	Physical Dimensions	Cpk>1.67	-	-	-	1/10/0	2/20/0	-
ESD	E2	ESD CDM	-	250 Volts	1/3/0	1/3/0	-	-	3/9/0
ESD	E2	ESD HBM	-	1000 Volts	1/3/0	1/3/0	-	-	3/9/0
ESD	E2	ESD HBM (Bus Pins)	-	16000 Volts	1/3/0	1/3/0	-	-	-
LU	E4	Latch-Up	Per JESD78	-	1/3/0	1/3/0	-	-	3/18/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	-	-	3/60/0
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	-	2/60/0	-	-
FTY	E6	Final Test Yield	-	-	1/1/0	1/1/0	-	-	-

- QBS: Qual By Similarity
- Qual Device SN65HVD06DR is qualified at MSL1 260C
- Qual Device SN65HVD07DR is qualified at MSL1 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

Qualification Report
Approve Date 03-March-2023

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: SN65HVD50DR	Qual Device: SN65HVD53DR	QBS Reference: TCAN1044VDRQ1	QBS Reference: TCAN1044VDRQ1	QBS Reference: TPS51217DSCR	QBS Reference: TCAN1043DQ1
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	1/77/0	2/154/0	3/231/0	3/231/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	1/77/0	2/154/0	3/231/0	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	-	1/77/0	2/154/0	3/231/0	3/231/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-	-	-	3/231/0	-
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	-	1/45/0	2/90/0	-	1/45/0
HTOL	B1	Life Test	125C	1000 Hours	-	-	1/77/0	2/154/0	-	1/77/0
HTOL	B1	Life Test	135C	635 Hours	-	-	-	-	3/231/0	-
WBS	C1	Ball Shear	76 balls, 3 units min	Wires	1/76/0	1/76/0	-	-	-	-
WBP	C2	Bond Pull	76 Wires, 3 units min	Wires	1/76/0	1/76/0	-	-	-	-

SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	-	1/15/0	-	1/15/0
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	-	1/15/0	-	1/15/0
PD	C4	Physical Dimensions	Cpk>1.67	-	-	-	1/10/0	2/20/0	-	3/30/0
ESD	E2	ESD CDM	-	250 Volts	1/3/0	1/3/0	-	-	3/9/0	-
ESD	E2	ESD HBM	-	1000 Volts	1/3/0	1/3/0	-	-	3/9/0	-
ESD	E2	ESD HBM (Bus Pins)	-	16000 Volts	1/3/0	1/3/0	-	-	-	-
LU	E4	Latch-Up	Per JESD78	-	1/3/0	1/3/0	-	-	3/18/0	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0	-	-	3/60/0	-
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	-	2/60/0	-	-	1/30/0
FTY	E6	Final Test Yield	-	-	1/1/0	1/1/0	-	-	-	-

- QBS: Qual By Similarity
- Qual Device SN65HVD50DR is qualified at MSL1 260C
- Qual Device SN65HVD53DR is qualified at MSL1 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

Qualification Report
Approve Date 27-FEBRUARY -2023

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: SN65HVD08DR	QBS Reference: TCAN1044VDRQ1	QBS Reference: TCAN1044VDRQ1	QBS Reference: TPS51217DSCR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	1/77/0	2/154/0	3/231/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	1/77/0	2/154/0	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	1/77/0	2/154/0	3/231/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-	-	3/231/0
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	1/45/0	2/90/0	-
HTOL	B1	Life Test	125C	1000 Hours	-	1/77/0	2/154/0	-
HTOL	B1	Life Test	135C	635 Hours	-	-	-	3/231/0
WBS	C1	Ball Shear	76 balls, 3 units min	Wires	1/76/0	-	-	-
WBP	C2	Bond Pull	76 Wires, 3 units min	Wires	1/76/0	-	-	-
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	1/15/0	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	1/15/0	-

PD	C4	Physical Dimensions	Cpk>1.67	-	-	1/10/0	2/20/0	-
ESD	E2	ESD CDM	-	250 Volts	1/3/0	-	-	3/9/0
ESD	E2	ESD HBM	-	1000 Volts	1/3/0	-	-	3/9/0
ESD	E2	ESD HBM (Bus Pins)	-	16000 Volts	1/3/0	-	-	-
LU	E4	Latch-Up	Per JESD78	-	1/3/0	-	-	3/18/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	-	3/60/0
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	2/60/0	-	-
FTY	E6	Final Test Yield	-	-	1/1/0	-	-	-

- QBS: Qual By Similarity
- Qual Device SN65HVD08DR is qualified at MSL1 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

Qualification Report
Approve Date 03-March-2023

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: SN65HVD3088EDR	Qual Device: SN65HVD3088EDGSR	Qual Device: SN65HVD3083EDGSR	Qual Device: SN65HVD3086EDGSR	QBS Reference: TP551217DSOR	QBS Reference: TCAN141DQ1	QBS Reference: SN65HVD3081EDR	QBS Reference: SN65HVD3081EDQKR	QBS Reference: SN65HVD3088EDR	QBS Reference: SN65HVD3088EDQKR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	-	-	3/231/0	3/231/0	-	-	-	-
UHAST	A3	Autoclave	121C/15psi	96 Hours	-	1/77/0	-	-	3/231/0	3/231/0	-	-	-	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	1/77/0	-	-	3/231/0	3/231/0	-	-	-	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-	-	-	3/231/0	-	-	-	-	-
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	-	-	-	-	1/45/0	-	-	-	-
HTOL	B1	Life Test	125C	1000 Hours	-	-	-	-	-	1/77/0	-	-	-	-
HTOL	B1	Life Test	135C	635 Hours	-	-	-	-	3/231/0	-	-	-	-	-
WBS	C1	Ball Shear	76 balls, 3 units min	Wires	1/76/0	1/76/0	1/76/0	-	-	-	1/76/0	1/76/0	1/76/0	1/76/0
WBP	C2	Bond Pull	76 Wires, 3 units min	Wires	1/76/0	1/76/0	1/76/0	1/76/0	-	-	1/76/0	1/76/0	1/76/0	1/76/0
SD	C3	Pb Solderability	Precondition w/155C Dry Bake (0 hrs +/- 15 minutes)	-	-	-	-	-	-	1/15/0	-	-	-	-
SD	C3	Pb-Free Solderability	Precondition w/155C Dry Bake (0 hrs +/- 15 minutes)	-	-	-	-	-	-	1/15/0	-	-	-	-
PD	C4	Physical Dimensions	Color: L67	-	-	-	-	-	-	3/30/0	-	-	-	-
ESD	E2	ESD CDM	-	1500 Volts	-	-	-	-	3/9/0	-	1/3/0	1/3/0	1/3/0	1/3/0
ESD	E2	ESD CDM	-	350 Volts	1/3/0	1/3/0	1/3/0	1/3/0	-	-	-	-	-	-
ESD	E2	ESD HBM	-	1000 Volts	1/3/0	1/3/0	1/3/0	-	-	-	-	-	-	-
ESD	E2	ESD HBM (Bus Pins)	-	12000 Volts	1/3/0	1/3/0	1/3/0	-	-	-	-	-	-	-
ESD	E2	ESD HBM (Bus Pins)	-	15000 Volts	-	-	-	-	-	1/3/0	-	-	1/3/0	-
ESD	E2	ESD HBM	-	2000 Volts	-	-	-	-	3/9/0	-	-	-	-	-
ESD	E2	ESD HBM	-	4000 Volts	-	-	-	-	-	1/3/0	-	-	1/3/0	-
LU	E4	Latch-Up	Per JESD78	-	1/3/0	1/3/0	1/3/0	-	3/18/0	-	1/6/0	-	1/6/0	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0	1/30/0	-	3/60/0	-	1/30/0	-	1/30/0	-
CHAR	E5	Electrical Distributions	Color: L67 Room, hot, and cold	-	-	-	-	-	-	1/30/0	-	-	-	-
FTY	E6	Final Test Yield	-	-	1/1/0	1/1/0	1/1/0	1/1/0	-	-	-	-	-	-

- QBS: Qual By Similarity
- Qual Device SN65HVD3088EDR is qualified at MSL1 260C
- Qual Device SN65HVD3088EDGSR is qualified at MSL1 260C
- Qual Device SN65HVD3083EDGSR is qualified at MSL1 260C
- Qual Device SN65HVD3086EDGSR is qualified at MSL1 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

Qualification Report
Approve Date 03-March-2023

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: SN65HVD52DR	Qual Device: SN65HVD55DR	QBS Reference: TCAN1044VDRQ1	QBS Reference: TCAN1044VDRQ1	QBS Reference: TPSS51217/DSCR	QBS Reference: TCAN1043DQ1
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	1/77/0	2/154/0	3/231/0	3/231/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	1/77/0	2/154/0	3/231/0	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	-	1/77/0	2/154/0	3/231/0	3/231/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-	-	-	3/231/0	-
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	-	1/45/0	2/90/0	-	1/45/0
HTOL	B1	Life Test	125C	1000 Hours	-	-	1/77/0	2/154/0	-	1/77/0
HTOL	B1	Life Test	135C	635 Hours	-	-	-	-	3/231/0	-
WBS	C1	Ball Shear	76 balls, 3 units min	Wires	1/76/0	1/76/0	-	-	-	-
WBP	C2	Bond Pull	76 Wires, 3 units min	Wires	1/76/0	1/76/0	-	-	-	-

SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	-	1/15/0	-	1/15/0
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	-	1/15/0	-	1/15/0
PD	C4	Physical Dimensions	Cpk>1.67	-	-	-	1/10/0	2/20/0	-	3/30/0
ESD	E2	ESD CDM	-	250 Volts	1/3/0	1/3/0	-	-	3/9/0	-
ESD	E2	ESD HBM	-	1000 Volts	1/3/0	1/3/0	-	-	3/9/0	-
ESD	E2	ESD HBM (Bus Pins)	-	16000 Volts	1/3/0	1/3/0	-	-	-	-
LU	E4	Latch-Up	Per JESD78	-	1/3/0	1/3/0	-	-	3/18/0	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0	-	-	3/60/0	-
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	-	2/60/0	-	-	1/30/0
FTY	E6	Final Test Yield	-	-	1/1/0	1/1/0	-	-	-	-

- QBS: Qual By Similarity
- Qual Device [SN65HVD52DR](#) is qualified at MSL1 260C
- Qual Device [SN65HVD55DR](#) is qualified at MSL1 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

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

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