

<b>PCN Number:</b>	20220615000.1	<b>PCN Date:</b>	June 16, 2022
<b>Title:</b>	Qualification of new Fab site (RFAB) using qualified Process Technology, Die Revision, Datasheet update and additional Assembly site 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>	Sep 16, 2022	<b>Sample requests accepted until:</b>	July 16, 2022*

**\*Sample requests received after July 16, 2022 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 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 assembly site (MLA) options for selected devices as listed below in the product affected section.

Current Fab Site			New Fab Site		
Fab Site	Process	Wafer Diameter	Fab Site	Process	Wafer Diameter
DL-LIN	LBC2	150 mm	RFAB	LBC7	300 mm

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

**Construction Differences:** No Material differences between assembly sites

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



SN55LBC180, SN65LBC180, SN75LBC180  
SLLS174H – FEBRUARY 1994 – REVISED JUNE 2022

Changes from Revision G (April 2009) to Revision H (June 2022)	Page
• Changed the Ordering Information Table to the <i>Package Information</i> table.....	1
• Added the <i>Pin Configuration and Functions</i> .....	4
• Added the <i>Thermal Information Table</i> .....	6
• Fixed the typo in the unit for the Receiver enable $I_{IH}$ to change the unit from A to $\mu$ A.....	7
• Updated <a href="#">Figure 6-1</a> , <a href="#">Figure 6-2</a> , and <a href="#">Figure 6-3</a> , limiting the x-axis to a maximum of 70 mA driver output current.....	9
• Updated <a href="#">Figure 9-1</a> to remove legacy terminology .....	17

Product Folder	Current Datasheet Number	New Datasheet Number	Link to full datasheet
SN65LBC180	SLLS174G	SLLS174H	<a href="http://www.ti.com/product/SN55LBC180">http://www.ti.com/product/SN55LBC180</a>

Tube and temp versions of the devices are included in EOL notice PDN# 20220615001.3.

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
<b>RFAB</b>	<b>RFB</b>	<b>USA</b>	<b>Richardson</b>

**Die Rev:**

Current	New
Die Rev [2P]	<b>Die Rev [2P]</b>
A	-

**Assembly Site Information:**

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
FMX	MEX	MEX	Aguascalientes
<b>TI Malaysia</b>	<b>MLA</b>	<b>MYS</b>	<b>Kuala Lumpur</b>

Sample product shipping label (not actual product label):

**Product Affected:**

SN65LBC180DR	SN65LBC180DRG4
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**Qualification Report**  
**Approve Date 10-May-2022**

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

Type	Test Name / Condition	Duration	Qual Device: _SN65LBC180DR	QBS Process Reference: TP S51217DSC	QBS Process Reference: TP S51218DSC	QBS Package Reference: TCAN1043DQ1
AC	Autoclave 121C	96 Hours	-	6/462/0	-	3/231/0
CDM	ESD - CDM	1500 V	1/3/0	3/9/0	-	-
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0	3/60/0	1/20/0	1/30/0
HAST	Biased HAST 130C/85%RH	96 Hours	-	3/231/0	-	3/231/0
HBM	ESD – HBM(Bus pins)	12000 V	1/3/0	-	-	-
HBM	ESD – HBM (All pins)	4000 V	1/3/0	-	-	-
HTOL	Life Test, 135C	635 Hours	-	3/231/0	-	-
HTSL	High Temp Storage Bake 175C	500 Hours	-	-	-	1/45/0
LU	Latch-up	(Per JESD78)	1/6/0	3/18/0	-	-
MSL	Moisture Sensitivity, L1	L1-260C	1/12/0	-	-	-
PD	Physical Dimensions	Cpk>1.67	-	-	-	3/30/0
SD	Surface Mount Solderability	PB Free Solder	-	-	-	1/15/0
SD	Surface Mount Solderability	PB Solder	-	-	-	1/15/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	-	3/231/0
WBP	Bond Pull	76 Wires, 3 units min	1/76/0	-	-	-
WBS	Ball Bond Shear	76 balls, 3 units min	1/76/0	-	-	3/90/0
YLD	Yield Evaluation	(per mfg. Site specification)	Pass	-	-	-

- QBS: Qual By Similarity

- Qual Device \_SN65LBC180DR is qualified at LEVEL1-260C

- 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 shown 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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