

12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20170616002

Qualification of MIHO8 as an additional wafer fab site option for select devices in the LBC7 process technology Change Notification / Sample Request

Date: June 16, 2017

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.

We request you acknowledge 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 you require samples or additional data to support your evaluation, please request within 30 days.

The proposed first ship date is indicated 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, contact your local Field Sales Representative or the PCN Manager (PCN_ww_admin_team@list.ti.com).

Sincerely,

PCN Team SC Business Services

20170616002 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 twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE SN65MLVD206DR SN65MLVD206D **CUSTOMER PART NUMBER**

null null

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

PCN Number: 20170616002 **PCN Date:** Jun 16, 2017 Qualification of MIHO8 as an additional wafer fab site option for select devices in Title: LBC7 process technology **Customer Contact:** PCN Manager Dept: **Quality Services Estimated Sample** Date provided at **Proposed 1st Ship Date:** Sep 16, 2017 **Availability:** sample request. **Change Type:** Assembly Site **Assembly Process Assembly Materials** Mechanical Specification **Electrical Specification** Design **Test Site** Packing/Shipping/Labeling **Test Process** Wafer Bump Site Wafer Bump Material Wafer Bump Process Wafer Fab Materials Wafer Fab Process $oxed{oxed}$ Wafer Fab Site Part number change

PCN Details

Description of Change:

This change notification is to announce the qualification of MIHO8 as an additional wafer fab site option for the LBC7 devices listed in the product affected section of this document.

Current Sites				Additional Sites	
Current Fab Site	Fab Process	Wafer Diameter	Additional Fab Site	Fab Process	Wafer Diameter
FR-BIP-1	LBC7	200 mm	MIHO8	LBC7	200 mm

The LBC7 process was previously qualified at MIHO on 1/14/2005. Qualification details are shown in the Qual Data Section of this document.

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 Code (20L)	Chip Site Country Code (21L)	Chip Site City
FR-BIP-1	TID	DEU	Freising

Additional:

MIHO8	MH8	JPN	Ibaraki
Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City

Sample product shipping label (not actual product label)



(1P) \$N74L\$07N\$R (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY (1T) 7523483S12 (P) (2P) REV: (V) 0033317 (20L) CSO: SHD (21L) CCO: USA (22L) ASO: MLA (23L) ACO: MYS

LBL: 5A (L)T0:1750
Product Affected:

SN65MLVD206D SN65MLVD206DR

Qualification Report

SN65MLVD206 Approve Date 14-June-2017

Product Attributes

Attributes	Qual Device: SN65MLVD206	QBS Process Reference: TPS62110RSA	QBS Package Reference: LM358DR	QBS Package Reference: TL494IDR
Assembly Site	FMX	CAR	FMX	FMX
Package Family	SOIC	QFN	SOIC	SOIC
Wafer Fab Supplier	MIHO8	MIHO8	SFAB	SFAB
Wafer Fab Process	LBC7	LBC7	JI-SLM	JI-LIN

⁻ QBS: Qual By Similarity

Qualification Results

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

	Туре	Test Name / Condition	Duration	Qual Device: SN65MLVD206	QBS Process Reference: TPS62110RSA	QBS Package Reference: LM358DR	QBS Package Reference: TL494IDR
	AC	Autoclave 121C	96 Hours	1/77/0	3/231/0	1/77/0	3/231/0
	CDM	ESD - CDM	1500 V	1/3/0	-	-	-
	ED	Electrical Characterization	Per Datasheet Parameters	Pass	-	-	-
	ELFR	Early Life Failure Rate, 140C	48 Hours	-	3/1881/0	-	-
	FLAM	Flammability (IEC 695- 2-2)		-	-	-	3/15/0
	FLAM	Flammability (UL 94V- 0)	-	-	•	-	3/15/0
	FLAM	Flammability (UL-1694)		-	-	-	3/15/0
	HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0	1/77/0	3/229/0
	HBM	ESD - HBM	4000 V	1/3/0	-	-	-
	НВМ	ESD - HBM (pins 6,7 only)	16000 V	1/3/0	-	-	-
	HTOL	Life Test, 140C	480 Hours	-	3/231/0	-	-
	HTOL	Life Test, 150C	300 Hours	-	-	1/77/0	3/231/0
	HTSL	High Temp Storage Bake 170C	420 Hours	-	3/231/0	1/77/0	3/231/0
	LU	Latch-up	(Per JESD78)	1/6/0	-	-	-
	TC	Temperature Cycle, - 65/150C	500 Cycles	1/77/0	3/231/0	3/231/0	3/231/0
	TS	Thermal Shock - 65/150C	500 Cycles	-	3/231/0	3/231/0	3/231/0
	WBP	Bond Pull	Wires	1/76/0	-	-	-
	WBS	Ball Bond Shear	Wires	1/76/0	-	-	-
_		tioning was parformed for A	41	T TUD/D:1114/	T T	1	ac applicable

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

Green/Pb-free Status:

Qualified Pb-Free (SMT) and Green

⁻ Qual Device SN65MLVD206BD is qualified at LEVEL1-260C

⁻ 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/

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
Japan	PCNJapanContact@list.ti.com