

STRUMENTS 12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20191118001.1A Qualification of CDAT as an additional assembly site for select QFN devices Change Notification / Sample Request

Date: January 31, 2020

Dear TI Customer:

Revision A is to announce the <u>addition</u> of new devices that were not included on the original PCN notification.

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.

The customer should acknowledge receipt of this notification by email within **30** days of the date of receipt. Lack of acknowledgement of this notice within 30 days constitutes customer acceptance of the change.

Samples or additional data to support customer evaluation must be requested within 30 days of receipt of this notification. If samples are requested for evaluation the customer must provide evaluation results within the sample evaluation period indicated on page 3 of this notification. The Sample Evaluation Period begins on the date the customer receives samples from TI.

If the customer approved the change TI can proceed with implementation of the change. The proposed first ship date is shown on page 3.

If the customer does not approve the PCN or the approval response is not provided within the Sample Evaluation Period, TI can implement the change, but the customer may elect to place an order for unchanged product by the Last Time Buy Date for delivery by the Last Time Ship Date. TI cannot guarantee that shipments to the customer after any last time order is delivered will not include the changed material. If the customer places an order with delivery after the Last Time Shipment Date, the order may be fulfilled with changed material or any material processed to TI specifications at that future time.

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 Team (<u>PCN www admin team@list.ti.com</u>). For sample requests or sample related questions, contact your field sales representative.

Sincerely,

PCN Team SC Business Services

20191118001.1A Change Notification / Sample Request Attachments

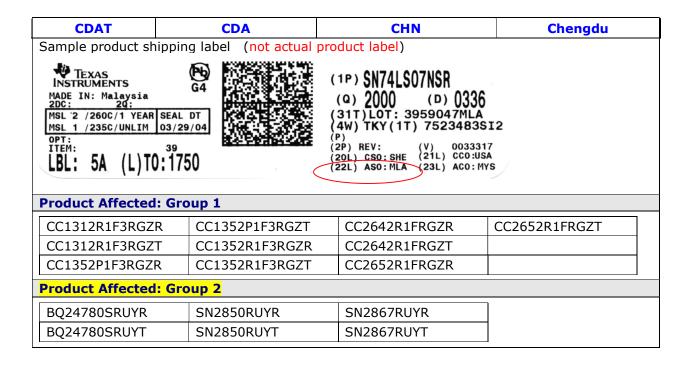
Products Affected:

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 BQ24780SRUYR 39070396

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

PCN	Num	ber:	20191118	8001.1	A			PC	N Date:	Jan 3	31, 2020
Title	e: (Qualifica	tion of CD	OAT as	an additio	nal asse	embly site for	select	: QFN dev	ices	
Cus	tomer	Contac	ct: PCN	Manager	Dep	t:	Quality Serv	ices			
Pro	posed	1 st Shi	Date:	Feb 2	0, 2020		Sample Eva	Peri			
	-		uy Date:		9,2020		Last Time Sh			t 27, 20	020
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		nbly Site			Desi	gn			Nafer Bur	np Site	
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Assembly Materials				Part number change				Wafer Bump Process			
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Group 1: Qualification Report

Approve Date 08-Nov-2019

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: CC1352P1F3RGZR	QBS Package Reference: CC2640R2FRGZR	QBS Package Reference: CC2640R2FRSMR
AC	Autoclave 121C	96 Hours	-	3/231/0	3/231/0
HTSL	High Temp Storage Bake 150C	1000 Hours	-	3/231/0	-
TC	Temperature Cycle, -55/125C	700 Cycles	1/77/0	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	3/231/0	3/231/0
ТНВ	Biased Temperature and Humidity, 85C/85%RH	1000 Hours	-	3/78/0	-

- QBS: Qual By Similarity
- Qual Device CC1352P1F3RGZR is qualified at LEVEL3-260C
- Preconditioning was performed for Autoclave, THB, Temperature Cycle, and HTSL.
- 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 Tl's external Web site: http://www.ti.com/

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

Group 2: Qualification Report

Approve Date 16-Jan-2020

Qualification Results

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

Туре	Test Name / Condition	Duration	Qual Device: BQ24780SRUY	QBS Product Reference: BQ24780SRUY	QBS Product Reference: <u>TLS2602DCA</u> (CARDINAL)	QBS Package Reference: TPS51220ARSNR	QBS Package Reference: <u>TPS53641RSBR</u>
AC	Autoclave 121C	192 Hours	-	-	-	-	3/231/0
ED	Electrical Characterization	Per Datasheet Parameters	-	Pass	-	-	-
HBM	ESD - HBM	2000 V	-	1/3/0	3/81/0	-	-
CDM	ESD - CDM	1000 V	1/3/0	1/3/0	-	-	-
HTOL	Life Test, 125C	1000 Hours	-	-	3/231/0	-	-
LU	Latch-up	(per JESD78)	-	1/6/0	3/18/0	-	-
PD	Physical Dimensions		1/5/0	-	-	3/15/0	3/15/0
TC	Temperature Cycle, -65/150C	500 Cycles	1/77/0	-	1/77/0	-	3/231/0

- QBS: Qual By Similarity
- Qual Device BQ24780SRUY is qualified at LEVEL2-260CG
- 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 Tl'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 contacts shown below or your local Field Sales Representative.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
WW PCN Team	PCN www admin_team@list.ti.com

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