

PCN Number:	20180305001			PCN Date:	March 5 2018												
Title:	Qualification of TI Chengdu A/T (CDAT) as an Assembly and test site for the BQ25890HRTWR/T																
Customer Contact:	PCN Manager	Dept:	Quality Services														
Proposed 1st Ship Date:	June 5 2018	Estimated Sample Availability:	Provided upon Request														
Change Type:																	
☒	Assembly Site	☐	Assembly Process	☒	Assembly Materials												
☐	Design	☐	Electrical Specification	☐	Mechanical Specification												
☒	Test Site	☐	Packing/Shipping/Labeling	☐	Test Process												
☐	Wafer Bump Site	☐	Wafer Bump Material	☐	Wafer Bump Process												
☐	Wafer Fab Site	☐	Wafer Fab Materials	☐	Wafer Fab Process												
	☐		Part number change														
PCN Details																	
Description of Change:																	
Texas Instruments is pleased to announce the qualification of TI Chengdu (CDAT) as an Additional Assembly site for the BQ25890HRTWR/T. Construction differences between devices built at the two sites are shown below: <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>What</td> <td>TI Clark</td> <td>TI Chengdu</td> </tr> <tr> <td>Mold Compound</td> <td>4208625</td> <td>4222198</td> </tr> </table> Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ.						What	TI Clark	TI Chengdu	Mold Compound	4208625	4222198						
What	TI Clark	TI Chengdu															
Mold Compound	4208625	4222198															
Reason for Change:																	
Continuity of Supply																	
Anticipated impact on Fit, Form, 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 from the TI ECO website .														
Changes to product identification resulting from this PCN:																	
<table border="1" style="width: 100%;"> <tr> <th>Assembly Site</th> <th>Assembly Site Origin (22L)</th> <th>Assembly Country Code (21L)</th> <th>Assembly City</th> </tr> <tr> <td>TI Clark</td> <td>QAB</td> <td>PHL</td> <td>Angeles City, Pampanga</td> </tr> <tr> <td>CDAT</td> <td>CDA</td> <td>CHN</td> <td>Chengdu</td> </tr> </table>						Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (21L)	Assembly City	TI Clark	QAB	PHL	Angeles City, Pampanga	CDAT	CDA	CHN	Chengdu
Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (21L)	Assembly City														
TI Clark	QAB	PHL	Angeles City, Pampanga														
CDAT	CDA	CHN	Chengdu														
Sample product shipping label (not actual product label)																	



MADE IN: Malaysia
2DC: 2Q:

MSL 2 /260C/1 YEAR SEAL DT
MSL 1 /235C/UNLIM 03/29/04

OPT:
ITEM:

LBL: 5A (L)T0:1750



(1P) SN74LS07NSR

(Q) 2000 (D) 0336

(31T) LOT: 3959047MLA

(4W) TKY (1T) 7523483SI2

(P)

(2P) REV: (V) 0033317

(20L) CS0: SHE (21L) CC0: USA

(22L) AS0: MLA (23L) AC0: MYS

Product Affected

BQ25890HRTWR

BQ25890HRTWT



TEXAS
INSTRUMENTS

TI Information
Selective Disclosure

Qualification Report

**BQ25890HRTW and EEPROM family in RFAB/LBC7, CD-Bump (BOAC 10um)
in CDAT with 2.0 mil Cu wire
Approve Date 02-Mar-2018**

Product Attributes

Attributes	Qual Device: <u>BQ25890HRTW</u>	QBS Product Reference: <u>BQ25890HRTW</u>	QBS Process Reference: <u>BQ25895RTWR</u>	QBS Process Reference: <u>TPS26600PWPR</u>
Assembly Site	CHENGDU A/T	CLARK AT	CHENGDU A/T	TAI (TITL)
Package Family	QFN	QFN	WQFN	HTSSOP
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	TBD
Wafer Fab Supplier	RFAB	RFAB	RFAB	RFAB
Wafer Process	LBC7+1UM VIATOP+6DU SEA	LBC7+1UM VIATOP+6DU SEA	LBC7	LBC7

Attributes	QBS Process Reference: <u>TPS26600RHFR</u>	QBS Process Reference: <u>TPS65633BKRTER</u>	QBS Package Reference: <u>BQ25895MRTW</u>
Assembly Site	CHENGDU A/T	CHENGDU A/T	CHENGDU A/T
Package Family	VQFN	WQFN	QFN
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	RFAB	RFAB	RFAB
Wafer Process	LBC8	LBC7X	LBC7X+1UM VIATOP+6DU SEAL

- QBS: Qual By Similarity

- Qual Device BQ25890HRTW is qualified at LEVEL2-260C

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: BQ25890HRTW	QBS Product Reference: BQ25890HRTW	QBS Process Reference: BQ25895RTWR	QBS Process Reference: TPS26600PWPR
AC	Autoclave 121C	96 Hours	-	-	-	-
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	Pass	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	2/154/0
HBM	ESD - HBM	3000 V	1/3/0	-	-	-
CDM	ESD - CDM	1500 V	1/3/0	-	-	-
HTOL	Life Test, 150C	300 Hours	-	-	-	3/231/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	3/231/0	-
LU	Latch-up	(per JESD78)	1/6/0	1/6/0	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	3/231/0	-
UHA	Unbiased HAST, 130C/85%RH	96 Hours	-	-	3/231/0	-



Type	Test Name / Condition	Duration	QBS Process Reference: TPS26600RHFR	QBS Process Reference: TPS65633BKRTWR	QBS Package Reference: BQ25895MRTW
AC	Autoclave 121C	96 Hours	-	-	3/270/0
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	-
HAST	Biased HAST, 130C/85%RH	96 Hours	1/77/0	-	-
HBM	ESD - HBM	3000 V	-	-	-
CDM	ESD - CDM	1500 V	-	-	-
HTOL	Life Test, 150C	300 Hours	-	-	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	3/231/0	3/231/0	3/231/0
LU	Latch-up	(per JESD78)	-	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	6/585/0
UHA	Unbiased HAST, 130C/85%RH	96 Hours	3/231/0	3/231/0	-

- 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 regional 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
Japan	PCNJapanContact@list.ti.com