		2019	190718001.1		PCN Date: Jul 22, 2019		22, 2019	
Title:	Qualification devices	on of addi	tional Fab site (F	RFAB) and Asse	mbly site (JC	ET) ol	otions for select	
Customer Contact:			PCN Manager		Dept:		Quality Services	
Proposed 1 st Ship Date:			Oct 22, 2019	Estimated Sampl Availability:		Date provided at sample request.		
Change Ty	ype:						· ·	
🛛 Assem	bly Site	[Assembly Process Assembly Materials					
Design			Electrical Specification		Mechanical Specific		ical Specification	
Test S			Packing/Shi					
	Bump Site		Wafer Bump		Wafer Bump Process			
🛛 🛛 Wafer	Fab Site		🛛 🛛 Wafer Fab M		V	Vafer F	Fab Process	
			Part numbe					
			PCN	Details				
	site (JCET) d		announce the q r the selected de	vices listed in t		Affecte	ed" section.	
Current			S	Wafer				
Site			Diameter	Fab Site			Diameter	
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PTPS54202DDCR	SN1704026DDCT	TPS54202HDDCR	TPS54302DDCR
PTPS54202DDCT	TPS54202DDCR	TPS54202HDDCT	TPS54302DDCT
SN1704026DDCR	TPS54202DDCT		

Qualification Report

SN1704026DDC

Approve Date 26-Jun-2019

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

Туре	Test Name / Condition	Duration	Qual Device: <u>SN1704026DDC</u>	QBS Product Reference: <u>TPS54202HDDC</u>	QBS Product Reference: <u>TPS54302DDC</u>	QBS Product Reference: <u>TPS563208DDC</u>	QBS Process Reference: <u>TPS65265RHB</u>
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	Pass	Pass	Pass
HBM	ESD - HBM	4000V	1/3/0	1/3/0	1/3/0	-	-
CDM	ESD - CDM	1500 V	1/3/0	1/3/0	1/3/0	-	1/3/0
LU	Latch-up	(per JESD78)	1/6/0	1/6/0	1/6/0	-	1/6/0
HTOL	Life Test, 125C	1000 Hours	-	-	1/77/0	-	3/231/0
HTSL	High Temp Storage Bake, 170C	420 Hours	-	-	-	3/231/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	3/231/0	-
UHAST	Unbiased HAST 130C/85%RH	96 Hours	-	-	-	3/231/0	-
тс	Temperature Cycle, -65/150C	500 Cycles	1/77/0	-	1/77/0	3/231/0	-
PD	Physical Dimensions	(per mechanical drawing)	-	-	-	3/15/0	-
SD	Surface Mount Solderability	Dry Bake 155C (4hours +/-15minutes); Pb-Free Solder	-	-	-	3/66/0	-
SD	Surface Mount Solderability	Dry Bake 155C (4hours +/-15minutes); Pb Solder	-	-	-	3/66/0	-

- QBS: Qual By Similarity

- Qual Device SN1704026DDC 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

Qualification Report

TPS54202DDC TPS54202HDDC TPS54302DDC Approve Date 26-Jun-2019

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

Туре	Test Name / Condition	Duration	Qual Device: TP \$54202DDC	Qual Device: <u>TP \$54202HDDC</u>	Qual Device: <u>TP \$54302DDC</u>	QBS Product Reference: <u>TP S563208DDC</u>	QBS Process Reference: <u>TP S65265RHB</u>
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	Pass	Pass	Pass
HBM	ESD - HBM	4000V	1/3/0	1/3/0	1/3/0	-	-
CDM	ESD - CDM	1500 V	1/3/0	1/3/0	1/3/0	-	1/3/0
LU	Latch-up	(per JESD78)	1/6/0	1/6/0	1/6/0	-	1/6/0
HTOL	Life Test, 125C	1000 Hours	-	-	1/77/0	-	3/231/0
HTSL	High Temp Storage Bake, 170C	420 Hours	-	-	-	3/231/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	3/231/0	-
UHAST	Unbiased HAST 130C/85%RH	96 Hours	-	-	-	3/231/0	-
тс	Temperature Cycle, -65/150C	500 Cycles	1/77/0	-	1/77/0	3/231/0	-
PD	Physical Dimensions	(per mechanical drawing)	-	-	-	3/15/0	-
SD	Surface Mount Solderability	Dry Bake 155C (4hours +/-15minutes); Pb-Free Solder	-	-	-	3/66/0	-
SD	Surface Mount Solderability	Dry Bake 155C (4hours +/-15minutes); Pb Solder	-	-	-	3/66/0	-

- QBS: Qual By Similarity

- Qual Device TPS54202HDDC is qualified at LEVEL1-260C

- Qual Device TPS54302DDC is qualified at LEVEL1-260C

- Qual Device TPS54202DDC 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

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