PCI	N Nun	nber:	202	30110	000.2						F	PCN D	ate:	January 10 2023	,
Titl	e:	Qualifica	ation	of TFI	ME as ar	n a	additiona	l Asse	mbly & Test	sit	e f	or sele	ect de	vices	
Cus	stome	er Conta	ct:	PCN A	<u>Nanager</u>		Dept:		Quality Se	rvic	es				
Pro	pose	d 1 <sup>st</sup> Shi	p Da	te:	Jul 9, 2	202	23		Sample acce				Feb :	10, 2023*	
*Sa	mple	reques	ts re	ceive	d after	Fe	b 10, 2	023 w	ill not be su	ıpp	or	ted.			
		Туре:													
		mbly Site					Design			Į			r Bum		
		mbly Pro				<u> </u>	Data S			Ļ	4			p Material	
		mbly Ma					Part nu		change	<u> </u>	╣			Process Cita	
		nanical S ing/Ship	•			$\frac{\square}{\square}$	Test S			+ +	╣		r Fab	Site Materials	
	rack	ing/omp	pirig/ i	Labelli	ig	<u> </u>	Test Fi	100633		1 7	┪			Process	
							PCN	Det	ails			Ware	TTUB	1100033	
Des	script	ion of C	hang	e:											
									ualification o					litional re as follows	:
		What					GTB	F			TF	ME			
		Mold (	•				SID#EN( 54			SID#R-37					
		Mount		pound			SID#EY0	000006		SID# A-06					
		Lead f	inish				NiPd	Au	Matte Sn						
							YM			Υ	ML	LLLS			
Upo in a Mat	Device symbolization format for lot traceability  Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ  Upon expiry of this PCN, there will be a transition period where TI will combine lead free solutions in a single standard part number. For example; TPS7B8333QDCYRQ1 — can ship with both Matte Sn and NiPdAu.  Example:  - Customer order for 7500 units of TPS7B8333QDCYRQ1 with 2500 units SPQ (Standard Pack Quantity per Reel).  - TI can satisfy the above order in one of the following ways.  I. 3 Reels of NiPdAu finish.  II. 3 Reels of Matte Sn finish  III. 2 Reels of Matte Sn and 1 reel of NiPdAu finish.  IV. 2 Reels of NiPdAu and 1 reel of Matte Sn finish.														
Rea	son f	or Chan	ge:												
		ontinuity													
Ant	Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):														
Nor		•					,	-		,		-			
Im	oact o	n Envir	onme	ental	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
No Change	No Change     ■     No Change     N	☑ No Change	No Change      Output     Description     Descrip

## Changes to product identification resulting from this PCN:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
GTBF	GTF	CHN	Sci. Park PhaseII Shatin
TFME	NFM	CHN	Economic Development Zone

Sample product shipping label (not actual product label)



(L)T0:<sup>39</sup>750



(1P) \$N74L\$07N\$R (Q) 2000 (D) 0336 (31T)LOT: 3959047MLA (4W) TKY(1T) 7523483\$I2 (P) (2P) REV: (V) 0033317

(2P) REV: (V) 0033317 (20L) CSO: SHE (21L) CCO:USA (22L) ASO: MLA (23L) ACO: MYS

## **Product Affected:**

TDC7D02220DCVD01	TDC7B03E00DCVD01	TDC7D04330DCVD01	TDC7B04E00DCVD01
TPS7B8333QDCYRQ1	TPS7B8350QDCYRQ1	TPS7B8433QDCYRQ1	TPS7B8450QDCYRQ1

TEXAS INSTRUMENTS TI Information Selective Disclosure

Automotive New Product Qualification Summary (As per AEC-Q100 and JEDEC Guidelines)

# TPS7B83XXQDCYRQ1M3 Assembly Transfer from GTBF to TFME Approved 08-Dec-2022

## **Product Attributes**

Attributes	Qual Device: <u>TPS7B8350QDCYRQ1M3</u>	QBS Product Reference: TPS7B8433QDCYRQ1	QBS Product Reference: TPS7B8450QDCYRQ1	QBS Process Reference: <u>TLC6C5816QPWPRQ1</u>
Automotive Grade Level	Grade 1	Grade 1	Grade 1	Grade 1
Operating Temp Range	-40 to +125 C	-40 to +125 C	-40 to +125 C	-40 to +125 C
Product Function	Power Management	Power Management	Power Management	Power Management
Wafer Fab Supplier	RFAB	RFAB	RFAB	RFAB
Die Revision	A	A	A	A
Assembly Site	TFME	GTBF	GTBF	TAI
Package Type	SOT-223	SOT-223	SOT-223	TSSOP
Package Designator	DCY	DCY	DCY	PWP
Ball/Lead Count	4	4	4	28

<sup>-</sup> QBS: Qual By Similarity

<sup>-</sup> Qual Device TPS7B8350QDCYRQ1M3 is qualified at Level2-260C

<sup>-</sup> Concurrently qualifies TPS7B83XXQDCYRQ1M3 family of devices.

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

T	уре	#	Test Spec	Min Lot Qty	SS/ Lot	Test Name / Condition	Duration	Qual Device: TPS7B8350QDCYRQ1M3	QBS Product Reference: TPS7B8433QDCYRQ1	QBS Product Reference: TPS7B8450QDCYRQ1	QBS Process Reference: <u>TLC6C5816QPWPRQ1</u>
			Test Group A – Accel	erated E	nvironi	nent Stress Tests					
	PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	Level 2-260C	3/693/0	-	3/1368/0	1
	PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	Level 3-260C	-	-	-	3/693/0
н	IAST	A2	JEDEC JESD22-A110	3	77	Biased HAST, 130C/85%RH	96 Hours	3/231/0	-	3/231/0	3/231/0
А	CLV	А3	JEDEC JESD22-A102	3	77	Unbiased HAST 121C/15psig	96 Hours	-	-	-	3/231/0
UI	HAST	А3	JEDEC JESD22-A118	3	77	Unbiased HAST 130C/85%RH	96 Hours	3/231/0	-	3/231/0	-
	TC	Α4	JEDEC JESD22-A104 and Appendix 3	3	77	Temperature Cycle, -65/150C	500 Cycles	3/231/0	-	3/231/0	3/231/0
	TC- VBP	Α4	MIL-STD883 Method 2011	1	30	Post Temp Cycle Bond Pull	Wires	3/90/0	-	1/30/0	-
F	РТС	A5	JEDEC JESD22-A105	1	45	Power Temperature Cycle, -40/125C	1000 Cycles	1/45/0	-	1/50/0	1/45/0
Н	ITSL	A6	JEDEC JESD22-A103	1	45	High Temp Storage Bake 150C	1000 Hours	-	-	-	3/231/0
Н	ITSL	A6	JEDEC JESD22-A103	1	45	High Temp Storage Bake 175C	500 Hours	1/45/0	-	3/231/0	-
			Test Group B – Accele	erated L	ifetime	Simulation Tests					
Н	TOL	B1	JEDEC JESD22-A108	3	77	Life Test, 125C	1000 Hours	-	-	3/231/0	-
Н	TOL	В1	JEDEC JESD22-A108	3	77	Life Test, 140C	480 Hours	-	-	-	3/231/0
E	EFR	В	AECQ100-008	3	77	Early Life, 150C	24 Hours	-	-		3/2400/0

Туре	#	Test Spec	Min Lot Qty	SS/ Lot	Test Name / Condition	Duration	Qual Device: TPS7B8350QDCYRQ1M3	QBS Product Reference: TPS7B8433QDCYRQ1	QBS Product Reference: TPS7B8450QDCYRQ1	QBS Process Reference: TLC6C5816QPWPRQ1
EDR	В3	AEC Q100-005	3	77	NVM Endurance, Data Retention, and Operational Life	-	-	-	3/231/0	-
		Test Group C – Pac	kage As	sembly	Integrity Tests					
WBS	C1	AEC Q100-001	1	30	Wire Bond Shear, Cpk>1.67	Wires	3/90/0	-	3/90/0	-
WBP	C2	MIL-STD883 Method 2011	1	30	Bond Pull, Cpk>1.67	Wires	3/90/0	-	3/90/0	-
SD	сз	JEDEC JESD22-B102	1	15	Pb Free Solderability - Dip and Look	4 Hours/155C	1/15/0	-	1/15/0	-
SD	СЗ	JEDEC JESD22-B102	1	15	Pb Solderability - Dip and Look	4 Hours/155C	1/15/0	-	1/15/0	-
PD	C4	JEDEC JESD22-B100 and B108	3	10	Auto Physical Dimensions	Cpk>1.67	3/30/0	-	3/30/0	-
SBS	C5	AEC Q100-010	3	50	Solder Ball Shear (Cpk>1.67)	Post HTSL/Bump	N/A for pkg	N/A for pkg	N/A for pkg	-
SBS	C5	AEC Q100-010	3	50	Solder Ball Shear (Cpk>1.67)	Solder Balls	N/A for pkg	N/A for pkg	N/A for pkg	-
LI	C6	JEDEC JESD22-B105	1	50	Lead Integrity	-	-	-	1/22/0	-
		Test Group D – Die	- Fabrica	ation Re	Hiability Tests					
EM	D1	JESD61	-	-	Electromigration	-	-	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements
TDDB	D2	JESD35	-	,	Time Dependent Dielectric Breakdown	-	-	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements
HCI	D3	JESD60 & 28	-	-	Hot Injection Carrier	-	-	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements
NBTI	D4	-	-	-	Negative Bias Temperature Instability	-	-	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements
SM	D5	-	-	-	Stress Migration	-	-	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements	Completed Per Process Technology Requirements

Туре	#	Test Spec	Min Lot Qty	SS/ Lot	Test Name / Condition	Duration	Qual Device: TPS7B8350QDCYRQ1M3	QBS Product Reference: TPS7B8433QDCYRQ1	QBS Product Reference: TPS7B8450QDCYRQ1	QBS Process Reference: <u>TLC6C5816QPWPRQ1</u>
		Test Group E – I	Electrical	I Verific	ation Tests					
нвм	E2	AEC Q100-002	1	3	ESD – HBM	3000 V	1/3/0	-	1/3/0	1/3/0
нвм	E2	AEC Q100-002	1	3	ESD – HBM	4000 V	-	-	-	1/3/0
CDM	E3	AEC Q100-011	1	3	ESD - CDM	1500 V	1/3/0	-	1/3/0	1/3/0
LU	E4	AEC Q100-004	1	6	Latch-up	Per AEC Q100-004	1/6/0	-	1/6/0	1/6/0
ED	E5	AEC Q100-009	3	30	Electrical Distributions	Cpk>1.67	3/90/0	1/30/0	3/90/0	3/90/0
		Miscellaneous								
FTY	-	Final Test Yield and Bin Summary (Test MQ)	1	1	-	-	2/2/0 (Note A)	-	-	-

Note:

A – Final Test Yield and Bin Summary performed on TPS7B8333QDCYRQ1M3 and TPS7B8350QDCYRQ1M3.

#### A1 (PC): Preconditioning:

Performed for THB, Biased HAST, AC, uHAST, TC & PTC samples, as applicable.

#### Ambient Operating Temperature by Automotive Grade Level:

Grade 0 (or E):  $-40^{\circ}$ C to  $+150^{\circ}$ C Grade 1 (or Q):  $-40^{\circ}$ C to  $+125^{\circ}$ C Grade 2 (or T):  $-40^{\circ}$ C to  $+105^{\circ}$ C Grade 3 (or I):  $-40^{\circ}$ C to  $+85^{\circ}$ C

#### E1 (TEST): Electrical test temperatures of Qual samples (High temperature according to Grade level):

Room/Hot/Cold: HTOL, ED

Room/Hot: THB / HAST, TC / PTC, HTSL, ELFR, ESD & LU

Room: AC/uHAST

#### Green/Pb-free Status:

Qualified Pb-Free (SMT) and Green

TI Qualification ID: R-CHG-2201-056



TI Information Selective Disclosure

## Automotive New Product Qualification Summary (As per AEC-Q100 and JEDEC Guidelines)

## TPS7B84XXQDCYRQ1M3 Assembly Transfer from GTBF to TFME Approved 14-Dec-2022

### **Product Attributes**

Attributes	Qual Device: TPS7B8450QDCYRQ1M3	QBS Product Reference: TPS7B8350QDCYRQ1M3	QBS Product Reference: TPS7B8433QDCYRQ1	QBS Product Reference: TPS7B8450QDCYRQ1	QBS Process Reference: TLC6C5816QPWPRQ1
Automotive Grade Level	Grade 1	Grade 1	Grade 1	Grade 1	Grade 1
Operating Temp Range	-40 to +125 C	-40 to +125 C	-40 to +125 C	-40 to +125 C	-40 to +125 C
Product Function	Power Management	Power Management	Power Management	Power Management	Power Management
Wafer Fab Supplier	RFAB	RFAB	RFAB	RFAB	RFAB
Die Revision	A	А	А	А	А
Assembly Site	TFME	TFME	GTBF	GTBF	TAI
Package Type	SOT-223	SOT-223	SOT-223	SOT-223	TSSOP
Package Designator	DCY	DCY	DCY	DCY	PWP
Ball/Lead Count	4	4	4	4	28

<sup>-</sup> QBS: Qual By Similarity

<sup>-</sup> Qual Device TPS7B8450QDCYRQ1M3 is qualified at Level2-260C

<sup>-</sup> Concurrently qualifies TPS7B84XXQDCYRQ1M3 family of devices.

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

Туре	#	Test Spec	Min Lot Qty	SS/ Lot	Test Name / Condition	Duration	Qual Device: TPS7B8450QDCY RQ1M3	QBS Product Reference: TPS7B8350QDCY RQ1M3	QBS Product Reference: TPS7B8433QD CYRQ1	QBS Product Reference: <u>TPS7B8450QDCYR</u> <u>Q1</u>	QBS Process Reference: TLC6C5816QP WPRQ1
		Test Group A – Accel	erated E	nviron	nent Stress Tests						
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	Level 2-260C	1/154/0	3/783/0	-	3/1368/0	-
PC	A1	JEDEC J-STD-020 JESD22-A113	3	77	Preconditioning	Level 3-260C	-	-	-	-	3/693/0
HAST	A2	JEDEC JESD22-A110	3	77	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0	-	3/231/0	3/231/0
ACLV	А3	JEDEC JESD22-A102	3	77	Unbiased HAST 121C/15psig	96 Hours	-	-	-	-	3/231/0
UHAST	А3	JEDEC JESD22-A118	1	77	Unbiased HAST 130C/85%RH	96 Hours	1/77/0	3/231/0	-	3/231/0	-
TC	A4	JEDEC JESD22-A104 and Appendix 3	1	77	Temperature Cycle, -65/150C	500 Cycles	1/77/0	3/231/0	-	3/231/0	3/231/0
TC- WBP	A4	MIL-STD883 Method 2011	1	30	Post Temp Cycle Bond Pull	Wires	1/30/0	3/90/0	-	1/30/0	-
PTC	A5	JEDEC JESD22-A105	1	45	Power Temperature Cycle, -40/125C	1000 Cycles	-	1/45/0	-	1/50/0	1/45/0
HTSL	A6	JEDEC JESD22-A103	1	45	High Temp Storage Bake 150C	1000 Hours	-	-	-	-	3/231/0
HTSL	A6	JEDEC JESD22-A103	1	45	High Temp Storage Bake 175C	500 Hours	-	1/45/0	-	3/231/0	-
		Test Group B – Accele	erated L	ifetime	Simulation Tests						
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test, 125C	1000 Hours	-	-	-	3/231/0	-
HTOL	B1	JEDEC JESD22-A108	3	77	Life Test, 140C	480 Hours	-	-	-	-	3/231/0
EFR	В	AECQ100-008	3	77	Early Life, 150C	24 Hours	-	-	-		3/2400/0
EDR	В3	AEC Q100-005	3	77	NVM Endurance, Data Retention, and Operational Life	-	-	-	-	3/231/0	-

W85   C.1   AEC C100-001   1   30   Wire Bond Shear,   Wires   1/30/0   3/30/0   - 3/3				Test Group C – Pac	kage As	sembly	Integrity Tests						
W89	П						Wire Bond Shear,			- 1 1-			
View   C2   2011   1   30   CgD-1.67   Pb Free   1/35/0   1/15/0		WBS	C1	AEC Q100-001	1	30		Wires	1/30/0	3/90/0	-	3/90/0	-
SD   C3   JEDEC JESD22-8102   1   15   Solderability - Dip and Look   Althours/155C   1/15/0   1/15/0   - 1/15/0   - 1/15/0   -   1/15/0   -	H			MIL-STD883 Method			Bond Pull,			- / /-		- / /-	
SS		WBP	C2	2011	1	30	Cpk>1.67	Wires	1/30/0	3/90/0	-	3/90/0	-
So	$\Box$						Pb Free						
SS   CS   JEDEC JESD22-8100   1   15   Ph Sodderability -   0   1/15/0   1/15/0   1/15/0   - 1/15		SD	C3	JEDEC JESD22-B102	1	15	Solderability - Dip	4 Hours/155C	1/15/0	1/15/0	-	1/15/0	-
SS   G   SIDUELES/SUZ-9102   1   15   Dip and Look   Anton Physical   Anton Physical   Cpb-1.67   1/10/0   3/30/0   - 3							and Look						
PD	П			IEDEO IEODAA DAAA		45	Pb Solderability -	4.11/4550	4 /45 /0	4/45/0		1/15/0	
PD   C4   and B108   3   10   Dimensions   CpD-167   X1100   33/300     3/3000     3/3000		2D	LS	JEDEC JESD22-B102	1	15	Dip and Look	4 Hours/155C	1/15/0	1/15/0	-	1/15/0	-
SBS   CS   AEC Q100-010   3   50   Solder Ball Shear (Cp0-1.67)   HTSL/Bump   N/A for pkg   N/A fo	П	DD.	C4	JEDEC JESD22-B100	,	10	Auto Physical	Culcat 67	1/10/0	2/20/0		2/20/0	
SSS   CS   AEC (200-010   3   50   C(pol-167)   HTSL/Bump   N/A for pig   N/A for pi		FD	04	and B108	3	10	Dimensions	Cpk>1.07	1/10/0	3/30/0	_	3/30/0	-
SBS   CS   AEC Q100-010   3   50   Solder Ball Shear (Cpl-1.67)   Solder Ball Shear (Cpl-1.	П	cpc	cs	AEC 0100-010	2	50	Solder Ball Shear	Post	N/A for pkg	N/A for pkg	N/A for pkg	N/A for pkg	
Sels   Care		303	63	ALC Q100-010	,	30	(Cpk>1.67)	HTSL/Bump	N/A IOI pkg	N/A IOI pkg	N/A IOI PKg	N/A IOI pkg	_
U C6   JEPEC JESO22-B105   1   50   Lead Integrity	П	cpc	CS.	AEC 0100-010	2	50	Solder Ball Shear	Colder Palls	N/A for pkg	N/A for pkg	N/A for pkg	N/A for pkg	
Test Group D - Die Fabrication Reliability Tests	Ш	303	C	ALC Q100-010	,	30	(Cpk>1.67)	Solder Dalis	N/A TOT PKg	N/A TOT PKg	N/A TOT PKg	N/A IOI pkg	-
Test Group D - Die Fabrication Reliability Tests		LI	C6	JEDEC JESD22-B105	1	50	Lead Integrity	-	-	_	_	1/22/0	-
EM   D1   JESD61   -     Electromigration   -       Completed Per Process Technology Requirements Requirements   Requirement	ш				- C-b-i	D							
EM				rest Group D – Die	e Fabrica	ation Ke	eliability rests						
FM													1 ' 1
NBTI   D4		EM	D1	JESD61	-	-	Electromigration	-	-	-			1 1
TDDB   D2   JESD35   -     Time Dependent   Dielectric   Breakdown   -     -													
TDDB   D2   JESD35   -	H										· ·		<u> </u>
TDDB   D2							Time Dependent						1 ' 1
HCl   D3   JESD60 & 28   -   -   Hot Injection   -   -   -   -     Hot Injection   -   -   -     Hot Injection   -   -   -     Hot Injection   -   -   -		TDDB	D2	JESD35	-	-	Dielectric	-	-	-			1 1
HCl   D3   JESD60 & 28   -   -   Hot Injection   -   -   -     -     Process   Technology   Requirements   Re							Breakdown						
HCI   D3   JESD60 & 28   -   -   Hot Injection   -   -   -   -     -     Process   Technology   Technology   Requirements   Technology   Te	H												
HCI   D3   JESD60 & 28   -   -     Carrier   -     -     Technology Requirements   Requirements   Requirements   Completed Per Process   Technology Requirements   Temperature   -   -     -							Hot Injection						1 ' 1
NBTI   D4		HCI	D3	JESD60 & 28	-	-		-	-	-			1 1
NBTI   D4   -   -     Negative Bias   -     -													
NBTI   D4	H												
NBTI   D4													
SM   D5     Stress Migration       Stress Migration         -     Completed Per Process Technology Requirements   Requirements   Requirements   Requirements   Requirements   Requirements   Requirements   Requirements   Completed Per Process   Process Technology Requirements   Technology   Requirements   Requirements   Process   Technology   Requirements   Technology   Technology   Requirements   Technology		NBTI	D4	-	-	-		-	-	-			
SM   D5   -   -   Stress Migration   -   -     Completed Per Process   Technology   Requirements   Test Group E - Electrical Verification Tests							Instability						1
SM   D5     Stress Migration   -   -   Technology Requirements	$\Box$										· ·		
Technology Requirements   Technology Requi			l								Process	Process	Process
Test Group E - Electrical Verification Tests   HBM   E2   AEC Q100-002   1   3   ESD - HBM   3000 V   1/3/0   1/3/0   -   1/3/0   1/3/0   1/3/0		SIVI	D5	-	-	-	Stress Migration	-	-	-	Technology	Technology	Technology
HBM E2 AEC Q100-002 1 3 ESD − HBM 3000 V 1/3/0 1/3/0 - 1/3/0 1/3/0 1/3/0  HBM E2 AEC Q100-002 1 3 ESD − HBM 4000 V 1/3/0  CDM E3 AEC Q100-011 1 3 ESD − CDM 1500 V 1/3/0 1/3/0 - 1/3/0 1/3/0  LU E4 AEC Q100-004 1 6 Latch-up Per AEC Q100-004 1/6/0 1/6/0 - 1/6/0 1/6/0  ED E5 AEC Q100-009 3 30 Electrical Distributions Cpk>1.67 1/30/0 3/90/0 1/30/0 3/90/0 3/90/0  Miscellaneous  Final Test Yield and Bin Summary (Test 1 1 1 2/2/0 (Note A) 2/2/0 (Note A)											Requirements	Requirements	Requirements
HBM E2 AEC Q100-002 1 3 ESD − HBM 3000 V 1/3/0 1/3/0 - 1/3/0 1/3/0 1/3/0  HBM E2 AEC Q100-002 1 3 ESD − HBM 4000 V 1/3/0  CDM E3 AEC Q100-011 1 3 ESD − CDM 1500 V 1/3/0 1/3/0 - 1/3/0 1/3/0  LU E4 AEC Q100-004 1 6 Latch-up Per AEC Q100-004 1/6/0 1/6/0 - 1/6/0 1/6/0  ED E5 AEC Q100-009 3 30 Electrical Distributions Cpk>1.67 1/30/0 3/90/0 1/30/0 3/90/0 3/90/0  Miscellaneous  Final Test Yield and Bin Summary (Test 1 1 1 2/2/0 (Note A) 2/2/0 (Note A)													
HBM E2 AEC Q100-002 1 3 ESD − HBM 4000 V 1/3/0  CDM E3 AEC Q100-011 1 3 ESD − CDM 1500 V 1/3/0 1/3/0 - 1/3/0 1/3/0  LU E4 AEC Q100-004 1 6 Latch-up Per AEC Q100-004 1/6/0 1/6/0 - 1/6/0 1/6/0  ED E5 AEC Q100-009 3 30 Electrical Distributions Cpk>1.67 1/30/0 3/90/0 1/30/0 3/90/0 3/90/0  Miscellaneous  Final Test Yield and Bin Summary (Test 1 1 1 2/2/0 (Note A) 2/2/0 (Note A)				Test Group E – I	lectrica	I Verific	cation Tests						
CDM   E3   AEC Q100-011   1   3   ESD - CDM   1500 V   1/3/0   1/3/0   - 1/3/0   1/3/0   1/3/0		HBM	E2	AEC Q100-002	1	3	ESD – HBM	3000 V	1/3/0	1/3/0	-	1/3/0	1/3/0
CDM E3 AEC Q100-011 1 3 ESD - CDM 1500 V 1/3/0 1/3/0 - 1/3/0 1/3/0  LU E4 AEC Q100-004 1 6 Latch-up Per AEC Q100-004 1/6/0 1/6/0 - 1/6/0 1/6/0  ED E5 AEC Q100-009 3 30 Electrical Distributions Cpk>1.67 1/30/0 3/90/0 1/30/0 3/90/0 3/90/0  Miscellaneous  Final Test Yield and Bin Summary (Test 1 1 1 2/2/0 (Note A) 2/2/0 (Note A)	$\vdash$												-
LU         E4         AEC Q100-004         1         6         Latch-up         Per AEC Q100-004         1/6/0         -         1/6/0         -         1/6/0         1/6/0         1/6/0         1/6/0         -         1/6/0         1/6/		HBM	E2	AEC Q100-002	1	3	ESD – HBM	4000 V	-	-	-	-	1/3/0
LU         E4         AEC Q100-004         1         6         Latch-up Q100-004         1/6/0         1/6/0         -         1/6/0 <t< td=""><td><math>\mid \uparrow \mid</math></td><td>CDM</td><td>E0</td><td>AEC 0100-011</td><td>1</td><td>,</td><td>ESD - CDM</td><td>1500 V</td><td>1/2/0</td><td>1/2/0</td><td>_</td><td>1/2/0</td><td>1/2/0</td></t<>	$\mid \uparrow \mid$	CDM	E0	AEC 0100-011	1	,	ESD - CDM	1500 V	1/2/0	1/2/0	_	1/2/0	1/2/0
LU   E4   AEC Q100-004   1   6   Latch-up   Q100-004   1/6/0   1/6/0   - 1/6/0   1/6/0   1/6/0	Ш	CDIVI	ES	AEC Q100-011	1	3	ESD - CDIVI	1200 A	1/3/0	1/3/0	-	1/5/0	1/5/0
ED E5 AEC Q100-009 3 30 Electrical Distributions Cpk>1.67 1/30/0 3/90/0 1/30/0 3/90/0 3/90/0 3/90/0 3/90/0 5/90/0		Ш	F4	AFC 0100-004	1	6	Latch-un		1/6/0	1/6/0	_	1/6/0	1/6/0
ED E5 AEC Q100-009 3 30 Distributions Cpk>1.67 1/30/0 3/90/0 1/30/0 3/90/0 3/90/0 3/90/0 3/90/0 3/90/0 3/90/0 5/90	Ш			. 120 0200 007	_	Ľ	Luteri up	Q100-004	2/0/0	2/0/0		1,0,0	2/0/0
Miscellaneous				450.0400.000	_		Electrical	0.1.4.67	4 (00 (0	2 /22 /2	4 (20 (2	2 (22 (2	2/22/2
Final Test Yield and   FTY - Bin Summary (Test 1 1 2/2/0 (Note A) 2/2/0 (Note A)		ED	E5	AEC Q100-009	3	30	Distributions	CpK>1.67	1/30/0	3/90/0	1/30/0	3/90/0	3/90/0
Final Test Yield and   FTY - Bin Summary (Test 1 1 2/2/0 (Note A) 2/2/0 (Note A)				Miscellaneous									
FTY - Bin Summary (Test 1 1 1 - 2/2/0 (Note A) 2/2/0 (Note A)													
		FTY	_		1	1	_	-	2/2/0 (Note A)	2/2/0 (Note A)	_	_	_
				MQ)									

A – Final Test Yield and Bin Summary performed on TPS7B8433QDCYRQ1M3 and TPS7B8450QDCYRQ1M3

## A1 (PC): Preconditioning:

Performed for THB, Biased HAST, AC, uHAST, TC & PTC samples, as applicable.

## Ambient Operating Temperature by Automotive Grade Level:

Grade 0 (or E): -40°C to +150°C Grade 1 (or Q): -40°C to +125°C Grade 2 (or T): -40°C to +105°C Grade 3 (or I): -40°C to +85°C

## E1 (TEST): Electrical test temperatures of Qual samples (High temperature according to Grade level):

Room/Hot/Cold: HTOL, ED Room/Hot: THB / HAST, TC / PTC, HTSL, ELFR, ESD & LU Room: AC/uHAST

## Green/Pb-free Status:

Qualified Pb-Free (SMT) and Green

TI Qualification ID: R-CHG-2202-047

For questions regarding this notice, e-mails can be sent to the contacts shown below or your local Field Sales Representative.

Location	E-Mail
WW Change Management Team	PCN www admin team@list.ti.com

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