



Qualification Report

TPS8268120SIP and TPS8268180SIP

Approve Date 24-Jun-2015

Updated 06/24/2015-Added QBS Data

Product Attributes

Attributes	Qual Device: TPS8268120SIP	Qual Device: TPS8268180SIP	QBS Product Reference: TPS62684YFF	QBS Product Reference: TPS8268105SIP	QBS Process Reference: TPS62110RSA	QBS Package Reference: TPS62690SIP-BUCK	QBS Package Reference: TPS81256SIP
Assembly Site	PTI-TAIWAN	PTI-TAIWAN	CLARK AT	PTI-TAIWAN	CAR	PTI-TAIWAN	PTI-TAIWAN
Package Family	uSIP	uSIP	WCSP	uSIP	QFN	MicroSiP	MicroSiP
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	MIHO 8	MIHO8	MIHO8	MIHO8	MIHO8	DMOS5	FFAB
Wafer Process	LBC7	LBC7	LBC7X	LBC7X	LBC7	LBC7	LBC7

- QBS: Qual By Similarity

- Qual Devices qualified at LEVEL2-260C: TPS8268120SIP, TPS8268180SIP

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPS8268120SIP	Qual Device: TPS8268180SIP	QBS Product Reference: TPS62684YFF	QBS Product Reference: TPS8268105SIP	QBS Process Reference: TPS62110RSA	QBS Package Reference: TPS62690SIP-BUCK	QBS Package Reference: TPS81256SIP
THB	Biased Temperature and Humidity 85C/85%RH	1000 Hours	-	-	-	-	-	1/77/0	2/154/0
AC	Autoclave 121C	96 Hours	-	-	-	-	3/231/0	-	-
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	Pass	Pass	-	Pass	Pass
ELFR	Early Life Failure Rate, 140C	48 Hours	-	-	-	-	3/1881/0	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-	3/231/0	-	-
HBM	ESD - HBM	3000 V	-	-	1/3/0	-	-	-	-
CDM	ESD - CDM	750 V	-	-	1/3/0	-	-	-	-
HTOL	Life Test, 115C	1056 Hours	-	-	-	-	-	1/77/0	-
HTOL	Life Test, 140C	480 Hours	-	-	-	-	3/231/0	-	-
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	-	-	1/77/0	-	3/218/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	-	-	3/231/0	-	-
LU	Latch-up	(per JESD78)	-	-	1/6/0	-	3/15/0	-	-
PD	Physical Dimensions	--	-	-	-	-	-	-	1/5/0
TC	Temperature Cycle -55/125C	700 Cycles	-	-	-	-	1/77/0	-	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	-	-	3/231/0	-	-
TS	Thermal Shock, -65/150C	500 Cycles	-	-	-	-	3/231/0	-	-
UHASt	Unbiased HAST, 130C/85%RH	96 Hours	-	-	-	-	1/77/0	-	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

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