

**Automotive Qualification Report**  
**MAX1792EUA25/33/50**

		✓	✓	✓	✓	□									
		Lot # 1 (SOKAD3044B)	Lot # 2 (S9UCBA012C)	Lot # 3 (I3S1BQ001)	Lot # (SOKADQ001E)	Lot # 5 (SV8BNA008BX)	Lot # 6 (S8N4CQ002H)								
<b>500mA</b> <b>Low-Dropout</b> <b>Linear Regulator</b>	Maxim Part Number	MAX1792EUA25/33/50	MAX1595EUA50	MAX1806EUA25	MAX1792EUA25/33/50	MAX893LESA	MAX3378EEUD								
	Description (Note 1)	AEC-Q100	AEC-Q100	Maxim (Note 2)	Maxim (Note 2)	Maxim	AEC-Q100								
	Operating Temperature	-40C to +85C	-40C to +85C	-40C to +85C	-40C to +85C	-40C to +85C	-40C to +85C								
	Temperature Grade	3	3	3	3	3	3								
	Fab Location	Maxim, San Jose	Maxim, San Jose	Maxim, San Jose	Maxim, San Jose	Maxim, San Jose	Maxim, San Jose								
	Fab Process	B8 (8", 0.8 um)	B8 (8", 0.8 um)	S8 (6", 0.8 um)	B8 (8", 0.8 um)	B8 (8", 0.8 um)	B8 (8", 0.8 um)								
	Die	PY27Z	PY57Y-1Z	PY37-1Z	PY27Z	PX81Z-1Z	RT40Z-4Z								
	Assembly Location	Anam/Amkor Philippines	NSEB, Thailand	Anam/Amkor Philippines	Unisem	NSEB, Thailand	Anam/Amkor Philippines								
	Die Size (mils)	60 x 60	62 x 72	56 x 56	60 x 60	41 x 103	80 x 61								
	Package	8uMAX (Exposed Paddle)	8uMAX	8uMAX (Exposed Paddle)	8uMAX (Exposed Paddle)	8 NSOIC	14 TSSOP								
	Wire Bond Material	Au .001"	Au .001"	Au .001"	Au .001"	Au .0013"	Au .001"								
	Mold Compound	EME7050B	KMC184-7	EME7050B	MP7400EH	EME6600CS	EME7351								
	Die Attach	84-1LMISR4	84-1LMISR4	84-1LMISR4	84-1LMISR4	84-1LMISR4	84-1LMISK4								
	Lead Frame	Copper	Copper	Copper	Copper	Copper	Copper								
	Lead Finish	85/15 Sn/Pb	85/15 Sn/Pb	85/15 Sn/Pb	100% Matte Sn	85/15 Sn/Pb	85/15 Sn/Pb								
Reliability Lot Number	A050006A	A050001A	R2002109A/B/C	R030093A/B/C	R030115K11	A050024A									
	Fails/Sample Size	Fails/Sample Size	Fails/Sample Size	Fails/Sample Size	Fails/Sample Size	Fails/Sample Size									
<b>AEC-Q100 Rev. F Tests</b>	<b>#</b>	<b>Conditions</b>	<b>+25C</b>	<b>+85C</b>	<b>-40C</b>	<b>+25C</b>	<b>+85C</b>	<b>-40C</b>	<b>+25C</b>	<b>+85C</b>	<b>-40C</b>	<b>+25C</b>	<b>+85C</b>	<b>-40C</b>	
MSL 1 - Preconditioning (PC)	A1	240C (Sn/Pb)	0/215			0/215									
		260C (100% Sn)							0/450						
=>CSAM			0/22			0/22									
Temperature Humidity-Bias (THB)	A2	85C/85%RH 1000 Hours													
Biased HAST (HAST)	A2	130C/85%RH 96 Hours	0/45	0/45		0/42	0/42	0/135		0/135					
Autoclave (AC)	A3	121C/85%RH 168 Hours						0/227		0/231					
Unbiased HAST (UHAST)	A3	130C/85%RH 96 Hours	0/45	0/45		0/45	0/45								
Temperature Cycle (TC)	A4	-65 to +150C 1000 Cycles	0/77	0/77		0/77	0/77	0/223		0/230					
=>Wirebond Pull (WBP)		>3 grams	0/88			0/90									
High Temperature Storage (HTSL)	A6	+150C 1000 Hours	0/80	0/80		0/80	0/80	0/213		0/231					
High Temperature Op Life (HTOL)	B1	+135C 1000 Hours	0/75	0/75	0/75	0/45	0/45	0/45		0/135			Pending 48	Pending 48	Pending 48
Early Life Failure Rate (ELFR)	B2	+135C 48 Hours													
Maxim Infant Mortality (IME)		+135C 12 Hours								0/8615					
Wire Bond Shear (WBS)	C1		(Note 3)												
Wire Bond Pull (WBP)	C2		(Note 3)					0/60							
Solderability (SD)	C3		0/15												
Physical Dimensions (PD)	C4		0/15					0/45							
Lead Integrity (LI)	C6		0/10												
(EM, TDDB, HCI)	D1-3														
Pre- and Post-Stress Electrical (TEST)	E1		All	All	All	All	All	All		All		All	All	All	
Human Body Model ESD (HBM)	E2		2500V	2500V											
Machine Model ESD (MM)	E2														
Charged Device Model ESD (CDM)	E3		750V	750V											
Latch-Up (LU)	E4		0/6	0/6											
Electrothermal Gate Leakage (GL)	E8														

(Note 1) AEC-Q100 test performed per Rev. F guidelines. Maxim tests performed to internal specification 10-3006.

(Note 2) Tests performed on three assembly lots.

(Note 3) Monitor data from assembly subcontractor.

✓ = Complete

□ = Open