

**Automotive Qualification Report**  
**MAX5073ETI+**

		□	✓	✓	✓
		Lot # 1 (SRJ1CA005A)	Lot # 2 (S8N4CQ002H)	Lot # 4 (S5GAGQ001Q)	Lot # 4 (TRS0F3049Q)
<b>2.2MHz, Dual-Output Buck or Boost Converter with Internal Power MOSFETs</b>	Maxim Part Number	<b>MAX5073ETI+</b>	MAX3378EEUD	MAX1765EUE+ (Note 2)	MAX1526ETM+ (Note 2)
	Description (Note 1)	<b>AEC-Q100</b>	AEC-Q100	Maxim	Maxim
	Operating Temperature	<b>-40C to +85C</b>	-40C to +85C	-40C to +85C	-40C to +85C
	Temperature Grade	<b>3</b>	3	3	3
	Fab Location	<b>Maxim, San Jose</b>	Maxim, San Jose	Maxim, San Jose	Maxim, San Antonio
	Fab Process	<b>B8 (8", 0.8 um MOS)</b>	B8 (8", 0.8um MOS)	B8 (8", 0.8um MOS)	B8 (0.8 um CMOS)
	Die	<b>NP68Z-1Z</b>	RT40Z-4Z	PX93Z	PN79Y
	Assembly Location	<b>NSEB Thailand</b>	Anam/Amkor Philippines	NSEB Thailand	NSEB Thailand
	Die Size (mils)	<b>128 x 121</b>	80 x 61	100 x 76	160x152
	Package	<b>28-Lead TQFN</b>	14 TSSOP	16-Lead TSSOP-EP	48-Lead TQFN-EP (6x6)
	Wire Bond Material	<b>Au .001"</b>	Au .001"	Au .0012"	Au .001"
	Mold Compound	<b>G770HCD</b>	EME7351	KMC184-7	G770HCD
	Die Attach	<b>AB8200T</b>	84-1LMISK4	84-1LMISR4	AB8200T
	Lead Frame	<b>Copper</b>	Copper	Copper	Copper
	Lead Finish	<b>100% Matte Sn</b>	85/15 Sn/Pb	100% Matte Sn	100% Matte Sn
	Reliability Lot Number	A060003, DC 0604	A050024, DC 0534	R040010A/B, DC 0350	R050191, DC 0531
		Failures/Sample Size		Failures/Sample Size	
<b>AEC-Q100 Rev. F Tests</b>	<b>#</b>	<b>Conditions</b>	<b>+25C</b>	<b>+85C</b>	<b>-40C</b>
MSL 1 - Preconditioning (PC)	A1	240C (Sn/Pb)			
		260C (100% Sn)	0/200		
=>CSAM		J-STD-020C (1 lot)	0/22		
Temperature Humidity-Bias (THB)	A2	85C/85%RH 1000 Hours			
Biased HAST (HAST)	A2	130C/85%RH 96 Hours	0/46	0/46	
Autoclave (AC)	A3	121C/85%RH 168 Hours			
Unbiased HAST (UHAST)	A3	130C/85%RH 96 Hours	Pending	Pending	
Temperature Cycle (TC)	A4	-65 to +150C 1000 Cycles	0/80	0/80	
=>Wirebond Pull (WBP)		>3 grams	0/135		
High Temperature Storage (HTSL)	A6	+150C 1000 Hours	0/80	0/80	
High Temperature Op Life (HTOL)	B1	+135C 1000 Hours	Pending	Pending	
Early Life Failure Rate (ELFR)	B2	+135C 48 Hours			
Maxim Infant Mortality (IME)		+135C 12 Hours			
Wire Bond Shear (WBS)	C1		(Note 3)		
Wire Bond Pull (WBP)	C2		(Note 3)		
Solderability (SD)	C3		0/15		
Physical Dimensions (PD)	C4		0/10		
Lead Integrity (LI)	C6		N/A		
(EM, TDDb, HCl)	D1-3				
Pre- and Post-Stress Electrical (TEST)	E1		All	All	All
Human Body Model ESD (HBM)	E2	JESD22/A114	Pending	Pending	
Machine Model ESD (MM)	E2	JESD22/A115			
Charged Device Model ESD (CDM)	E3	AEC-Q100-011	Pending	Pending	
Latch-Up (LU)	E4	JESD78, Class	0/12	0/12	

(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