

**Automotive Qualification Report
MAX3001EEUP**

		✓ Lot # 1 (IKJ1BA048A)	✓ Lot # 2 (I55AC2030C/02A)	✓ Lot # 3 (I8PABZ001B)	✓ Lot # 4 (NDLBPA327A)							
+1.2V to +5.5V, +15kV ESD protected, 0.1uA, 35Mbps, 8-Channel Level Translators	Maxim Part Number	MAX3001EEUP	MAX5222EKA	MAX5380LEUK	MAX3243CUI+							
	Description (Note 1)	AEC-Q100	Maxim	Maxim	Maxim							
	Operating Temperature	-40C to +85C	-40C to +85C	-40C to +85C	0C to +70C							
	Temperature Grade	3	3	3	4							
	Fab Location	Maxim, San Jose	Maxim, San Jose	Maxim, San Jose	Maxim, Beaverton							
	Fab Process	S6 (6", 0.6 um MOS)	S6 (6", 0.6 um MOS)	S6 (6", 0.6 um MOS)	S3 (6", 3 um MOS)							
	Die	RT50Y-1Z	DA85Y	DA68Y	RS16X-1Z							
	Assembly Location	Carsem-S	Carsem-M		Carsem-S							
	Die Size (mils)	100 x 83	24 x 67	56 x 37	91 x 151							
	Package	20-Lead TSSOP	8-Lead SOT	5-Lead SOT-23	28-Lead TSSOP							
	Wire Bond Material	Au .001"	Au .001"	Au .001"	Au .001"							
	Mold Compound	EME7351LS	EME7351LS		EME7351LS							
	Die Attach	84-1LMISR4	84-1LMISR4		84-1LMISR4							
	Lead Frame	Copper	Copper	Copper	Copper							
	Lead Finish	85/15 Sn/Pb	85/15 Sn/Pb	85/15 Sn/Pb	100% Matte Sn							
Reliability Lot Number	A050025, DC 0532	R000112FQ, DC 0011/28	R000112FQ, DC 0023	R020079, DC 0223								
		Failures/Sample Size		Failures/Sample Size								
AEC-Q100 Rev. F Tests	#	Conditions		+25C	+85C	-40C	+25C	+85C	-40C	+25C	+70C	0C
MSL 1 - Preconditioning (PC)	A1	240C (Sn/Pb)	0/215							0/450		
		260C (100% Sn)										
=>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	0/48	0/48			0/86		0/45		0/135	
Autoclave (AC)	A3	121C/85%RH 168 Hours					No Prec. 0/160		No Prec. 0/80		No Prec. 0/231	
Unbiased HAST (UHAST)	A3	130C/85%RH 96 Hours	0/67	0/67								
Temperature Cycle (TC)	A4	-65 to +150C 1000 Cycles	0/78	0/78			0/156		0/75		0/231	
=>Wirebond Pull (WBP)		>3 grams	0/75									
High Temperature Storage (HTSL)	A6	+150C 1000 Hours	0/151	0/151			0/157		0/78			
High Temperature Op Life (HTOL)	B1	+135C 1000 Hours	0/46	0/46	0/46		0/151		0/76			
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)							0/600		
Solderability (SD)	C3		0/15							0/45		
Physical Dimensions (PD)	C4		0/10									
Lead Integrity (LI)	C6		0/5									
(EM, Tddb, HCl)	D1-3											
Pre- and Post-Stress Electrical (TEST)	E1		All	All	All		All		All		All	
Human Body Model ESD (HBM)	E2	JESD22/A114	2500V	2500V								
Machine Model ESD (MM)	E2	JESD22/A115										
Charged Device Model ESD (CDM)	E3	AEC-Q100-011	750V	750V								
Latch-Up (LU)	E4	JESD78, Class II	0/11	0/11								

(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