

**Automotive Qualification Report**  
**MAX9205EAI**

		□	✓	✓	✓	✓	✓	✓										
		Lot # 1 (Q1LOBQ001H)	Lot # 2 (QFE0AQ003C)	Lot # 3 (QWB2AQ001A)	Lot # 4 (QR31BQ001A)	Lot # 5 (KXD0DQ004C)	Lot # 6 (Q5J0AQ001G)											
<b>10-Bit Bus LVDS Serializer</b>	Maxim Part Number	MAX9205EAI	MAX9209EUM	MAX9234EUM	MAX9244EUM	MAX1464AAI	MAX9205EAI											
	Description (Note 1)	AEC-Q100	AEC-Q100	AEC-Q100	AEC-Q100	AEC-Q100	AEC-Q100											
	Operating Temperature	-40C to +85C	-40C to +85C	-40C to +85C	-40C to +85C	-40C to +125C	-40C to +85C											
	Temperature Grade	3	3	3	3	1	3											
	Fab Location	TSMC Fab 9	TSMC Fab 9	TSMC Fab 9	TSMC Fab 9	TSMC	TSMC Fab 9											
	Fab Process	.35um 2P4M	.35um 2P4M	.35um 1P4M	.35um 1P4M	.50um 2P4M (w/memory)	.35um 2P4M											
	Die	HS05Z	HS30Z	HS37Z-2Z	HS39Z-1Z	SC64Z	HS05Z											
	Assembly Location	Anam/Amkor Philippines	Anam/Amkor Philippines	Anam/Amkor Philippines	Anam/Amkor Philippines	Anam/Amkor Philippines	Anam/Amkor Philippines											
	Die Size (mils)	58 x 77	88 x 117	97 x 139	108 x 159	115 x 127	58 x 77											
	Package	28-Lead SSOP	48-Lead TSSOP	48-Lead TSSOP	48-Lead TSSOP	28-Lead SSOP	28-Lead SSOP											
	Wire Bond Material	Au .001"	Au .001"	Au .001"	Au .001"	Au .001"	Au .001"											
	Mold Compound	EME6600CS	G700K	G700K	G700K	EME6600CS	G600											
	Die Attach	84-1LMISR4	8290	8290	8290	84-1LMISR4	8290											
	Lead Frame	Copper	Copper	Copper	Copper	Copper	Copper											
	Lead Finish	85/15 Sn/Pb	85/15 Sn/Pb	85/15 Sn/Pb	85/15 Sn/Pb	85/15 Sn/Pb	100% Matte Sn											
Reliability Lot Number	A050042, DC 0528	A050002, DC 0451	A050012, DC 0534	A050038, DC 0551	A050014, DC 0524	A050041, DC 0529												
		Failures/Sample Size	Failures/Sample Size	Failures/Sample Size	Failures/Sample Size	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>	<b>+25C</b>	<b>+85C</b>	<b>-40C</b>	<b>+25C</b>	<b>+125C</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			0/330			0/215						
		260C (100% Sn)													0/210			
	=>CSAM	J-STD-020C (1 lot)	0/22									0/22			0/22			
Temperature Humidity-Bias (THB)	A2	85C/85%RH 1000 Hours																
Biased HAST (HAST)	A2	130C/85%RH 96 Hours	0/47	0/47		0/45	0/45		0/47	0/47		0/44	0/44		0/35	0/35		
Autoclave (AC)	A3	121C/85%RH 168 Hours																
Unbiased HAST (UHAST)	A3	130C/85%RH 96 Hours	0/50	0/50		0/45	0/45		0/50	0/50		0/50	0/50		0/50	0/50		
Temperature Cycle (TC)	A4	-65 to +150C 1000 Cycles	0/80	0/80								0/80	0/80		0/78	0/78		
	=>Wirebond Pull (WBP)	>3 grams	0/140									0/130			0/140			
High Temperature Storage (HTSL)	A6	+150C 1000 Hours	0/80	0/80		0/77	0/77		0/80	0/80		0/78	0/78		0/80	0/80		
High Temperature Op Life (HTOL)	B1	+135C 1000 Hours	Pending /48	Pending /48	Pending /48	0/45	0/45	0/45	0/47	0/47	0/47	0/80	0/80	0/80		Pending /48	Pending /48	Pending /48
Early Life Failure Rate (ELFR)	B2	+135C 48 Hours							Pending	Pending								
Wire Bond Shear (WBS)	C1		(Note 3)									(Note 3)			(Note 3)			
Wire Bond Pull (WBP)	C2		(Note 3)									(Note 3)			(Note 3)			
Solderability (SD)	C3		0/15									0/15			0/15			
Physical Dimensions (PD)	C4		Pending									0/10			0/10			
Lead Integrity (LI)	C6		0/5									0/10			0/5			
(EM, TDD, HCI)	D1-3		TSMC			TSMC			TSMC			TSMC			TSMC			
Pre- and Post-Stress Electrical (TEST)	E1		All	All	All	All	All	All	All	All	All	All	All	All	All	All		
Human Body Model ESD (HBM)	E2	JESD22/A114	2000V	2000V														
Machine Model ESD (MM)	E2	JESD22/A115																
Charged Device Model ESD (CDM)	E3	AEC-Q100-011	1000V	1000V														
Latch-Up (LU)	E4	JESD78, Class II	0/11	0/11														
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