

7/10/2017



**RELIABILITY MONITOR REPORT
FOR**

San Antonio B8

MAXIM INTEGRATED

**160 RIO ROBLES
SAN JOSE, CA 95134**

**This Report was prepared by
MAXIM INTEGRATED Reliability Engineering**

Summary:

The data in the tables that follow was generated as the result of an on-going Process Reliability Monitor. The specific products in this process monitor are:

DS1687-3+	MAX156053AUT	MAX16053AUT+	MAX5072ETJ+	MAX9027EWT+
MAX9028EBT+T	MAX9814ETD+			

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 123245 QUANTITY: 591 FAILS: 0 FITS: 0.9

The parameters used to calculate this failure rate are as follows:

Cf: 60% Ea: 0.7 Tu: 25 °C

The reliability data follows and in this section is the detailed reliability data by stress. The reliability data section includes the latest data available. This report covers data between 4/1/2017 and 6/30/2017 .

Process Information:

Process Description: San Antonio B8

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1126	MAX5072ETJ+	135°C	1000 HRS	48	0	DRJ0DA013MX
HIGH TEMP OP LIFE	1126	MAX5072ETJ+	135°C	1000 HRS	32	0	DRJ0DA013MX
HIGH TEMP OP LIFE	1229	MAX16053AUT+	135°C	1000 HRS	90	0	TLKYDA006C#
HIGH TEMP OP LIFE	1328	MAX16053AUT+	135°C	1000 HRS	89	0	TLKYDA008G#
HIGH TEMP OP LIFE	1426	MAX16053AUT+	135°C	1000 HRS	90	0	TLKYDA009B#
HIGH TEMP OP LIFE	1630	MAX9814ETD+	135°C	1000 HRS	48	0	TAPZDA074DE
HIGH TEMP OP LIFE	1630	MAX9814ETD+	135°C	1000 HRS	34	0	TAPZDA074DE
HIGH TEMP OP LIFE	1636	MAX9027EWT+	135°C	1000 HRS	80	0	TOY2DA148AA
HIGH TEMP OP LIFE	1701	MAX9814ETD+	135°C	1000 HRS	47	0	TAPZDA077DA
HIGH TEMP OP LIFE	1701	MAX9814ETD+	135°C	1000 HRS	33	0	TAPZDA077DA
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1126	MAX5072ETJ+	150°C	1000 HRS	80	0	DRJ0DA013MX
STORAGE LIFE	1229	MAX16053AUT+	150°C	1000 HRS	50	0	TLKYDA006C#
STORAGE LIFE	1328	MAX16053AUT+	150°C	1000 HRS	50	0	TLKYDA008G#
STORAGE LIFE	1426	MAX16053AUT+	150°C	1000 HRS	47	0	TLKYDA009B#
STORAGE LIFE	1630	MAX9814ETD+	150°C	1000 HRS	80	0	TAPZDA074DE
STORAGE LIFE	1636	MAX9027EWT+	150°C	1000 HRS	50	0	TOY2DA148AA
STORAGE LIFE	1701	MAX9814ETD+	150°C	1000 HRS	80	0	TAPZDA077DA

Total: 0

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1126	MAX5072ETJ+	-65C TO +150C (Condition C)	1000 CYS	80	0	DRJ0DA013MX
TEMP CYCLE, 5' RAMP, 10' DWELL	1229	MAX16053AUT+	-65C TO +150C (Condition C)	500 CYS	80	0	TLKYDA006C#
TEMP CYCLE, 15' RAMP, 15' DWELL	1614	MAX9028EBT+TCHE	-40C TO +125C (Condition G)	100 CYS	80	0	TOY3DA139AC
TEMP CYCLE, 15' RAMP, 15' DWELL	1615	MAX9028EBT+TCHE	-40C TO +125C (Condition G)	100 CYS	80	0	TOY3DA140AB
TEMP CYCLE, 5' RAMP, 10' DWELL	1616	DS1687-3+	-40C TO +85C	500 CYS	80	0	MK410820AAA
TEMP CYCLE, 15' RAMP, 15' DWELL	1619	MAX9028EBT+TCHE	-40C TO +125C (Condition G)	100 CYS	80	0	TOY3DA141AF
TEMP CYCLE, 15' RAMP, 15' DWELL	1621	MAX9028EBT+TCHE	-40C TO +125C (Condition G)	100 CYS	80	0	TOY3DA145AH
TEMP CYCLE, 15' RAMP, 15' DWELL	1622	MAX9028EBT+TCHE	-40C TO +125C (Condition G)	100 CYS	80	0	TOY3DA147AH
TEMP CYCLE, 15' RAMP, 15' DWELL	1627	MAX9028EBT+TCHE	-40C TO +125C (Condition G)	100 CYS	80	0	TOY3DA149A#
TEMP CYCLE, 15' RAMP, 15' DWELL	1629	MAX9028EBT+TCHE	-40C TO +125C (Condition G)	100 CYS	80	0	TOY3DA150A#
TEMP CYCLE, 5' RAMP, 10' DWELL	1630	MAX9814ETD+	-65C TO +150C (Condition C)	1000 CYS	80	0	TAPZDA074DE
TEMP CYCLE, 15' RAMP, 15' DWELL	1630	MAX9028EBT+TCHE	-40C TO +125C (Condition G)	100 CYS	80	0	TOY3DA152A#
TEMP CYCLE, 15' RAMP, 15' DWELL	1630	MAX9028EBT+TCHE	-40C TO +125C (Condition G)	100 CYS	80	0	TOY3DA151C#
TEMP CYCLE, 15' RAMP, 15' DWELL	1631	MAX9028EBT+TCHE	-40C TO +125C (Condition G)	100 CYS	80	0	TOY3DA154A#
TEMP CYCLE, 15' RAMP, 15' DWELL	1631	MAX9028EBT+TCHE	-40C TO +125C (Condition G)	100 CYS	80	0	TOY3DA153A#
TEMP CYCLE, 15' RAMP, 15' DWELL	1634	MAX9028EBT+TCHE	-40C TO +125C (Condition G)	100 CYS	80	0	TOY3DA155DC
TEMP CYCLE, 15' RAMP, 15' DWELL	1637	MAX9028EBT+TCHE	-40C TO +125C (Condition G)	100 CYS	80	0	TOY3DA156AC

TEMP CYCLE, 15' RAMP, 15' DWELL	1637	MAX9028EBT+TCHE	-40C TO +125C (Condition G)	100	CYS	80	0	TOY3DA143AI
TEMP CYCLE, 15' RAMP, 15' DWELL	1641	MAX9028EBT+TCHE	-40C TO +125C (Condition G)	100	CYS	80	0	TOY3DA165AC
TEMP CYCLE, 5' RAMP, 10' DWELL	1701	MAX9814ETD+	-65C TO +150C (Condition C)	1000	CYS	80	0	TAPZDA077DA
Total:							0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
BIASED MOISTURE	1126	MAX5072ETJ+	130C, 85%	100	HRS	46	0	DRJ0DA013MX
BIASED MOISTURE	1126	MAX5072ETJ+	130C, 85%	100	HRS	34	0	DRJ0DA013MX
BIASED MOISTURE	1229	MAX16053AUT+	130C, 85%	100	HRS	80	0	TLKYDA006C#
BIASED MOISTURE	1249	MAX16053AUT+	130C, 85%	100	HRS	80	0	TLKYDA008E#
BIASED MOISTURE	1328	MAX16053AUT+	130C, 85%	100	HRS	80	0	TLKYDA008G#
BIASED MOISTURE	1328	MAX16053AUT+	130C, 85%	100	HRS	80	0	TLKYDA008GA
BIASED MOISTURE	1426	MAX16053AUT+	130C, 85%	100	HRS	80	0	TLKYDA009B#
BIASED MOISTURE	1544	MAX16053AUT+	130C, 85%	100	HRS	79	0	TLKYDA015E#
BIASED MOISTURE	1544	MAX16053AUT+	130C, 85%	100	HRS	80	0	TLKYDA015E3
BIASED MOISTURE	1630	MAX9814ETD+	130C, 85%	96	HRS	79	0	TAPZDA074DE
BIASED MOISTURE	1701	MAX9814ETD+	130C, 85%	96	HRS	80	0	TAPZDA077DA
Total:							0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
MOISTURE SOAK	1229	MAX16053AUT+	130C, 85%	100	HRS	80	0	TLKYDA006C#
MOISTURE SOAK	1328	MAX156053AUT+	130C, 85%	100	HRS	80	0	TLKYDA008G#
MOISTURE SOAK	1426	MAX16053AUT+	130C, 85%	100	HRS	80	0	TLKYDA009B#
Total:							0	

FAILURE RATE: MTTF (YRS): 123245 QUANTITY: 591 FAILS: 0 FITS: 0.9