

10/27/2017



**RELIABILITY MONITOR REPORT
FOR**

San Antonio E6

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:

87-1086U+L00	90-1230B+P70	90-1557W+P12	DS1923-F5#
--------------	--------------	--------------	------------

The calculated failure rate for devices using this process is:

FAILURE RATE: **MTTF (YRS): 1860** **QUANTITY: 80** **FAILS: 0** **FITS: 61.4**

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 7/1/2017 and 9/30/2017 .

Process Information:

Process Description: San Antonio E6

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1632	87-1086U+L00	135°C	500 HRS	26	0	ZJ620790AFG
HIGH TEMP OP LIFE	1632	87-1086U+L00	135°C	500 HRS	26	0	ZJ620790BAG
HIGH TEMP OP LIFE	1632	87-1086U+L00	135°C	500 HRS	28	0	ZJ620790CAH
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1630	DS1923-F5#	150°C	1000 HRS	80	0	MK4116444ABB-QAL
STORAGE LIFE	1630	DS1923-F5#	150°C	1000 HRS	80	0	MK4116446ABB-QAL
STORAGE LIFE	1630	DS1923-F5#	150°C	1000 HRS	80	0	MK411862AAA-2
STORAGE LIFE	1631	DS1923-F5#	150°C	1000 HRS	80	0	MK4116445ABB-QAL
STORAGE LIFE	1632	87-1086U+L00	150°C	1000 HRS	80	0	ZJ620790BAG
STORAGE LIFE	1632	87-1086U+L00	150°C	1000 HRS	90	0	ZJ620790AFG
STORAGE LIFE	1726	90-1557W+P12	150°C	500 HRS	50	0	MK418232AAA-REL
STORAGE LIFE	1726	90-1557W+P12	150°C	1000 HRS	50	0	MK418232AAA-REL
STORAGE LIFE	1726	90-1230B+P70	150°C	500 HRS	50	0	MK418234AAA-REL
STORAGE LIFE	1726	90-1230B+P70	150°C	1000 HRS	50	0	MK418234AAA-REL
STORAGE LIFE	1726	90-1557W+P12	150°C	500 HRS	50	0	MK418236AAA-REL
STORAGE LIFE	1726	90-1557W+P12	150°C	1000 HRS	50	0	MK418236AAA-REL
STORAGE LIFE	1726	90-1230B+P70	150°C	500 HRS	50	0	MK418238AAA-REL
STORAGE LIFE	1726	90-1230B+P70	150°C	1000 HRS	50	0	MK418238AAA-REL
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1630	DS1923-F5#	-65C TO +150C (Condition C)	1000 CYS	80	0	MK411862AAA-2
TEMP CYCLE, 5' RAMP, 10' DWELL	1632	87-1086U+L00	-65C TO +150C (Condition C)	1000 CYS	118	0	ZJ620790AFG
TEMP CYCLE, 5' RAMP, 10' DWELL	1632	87-1086U+L00	-65C TO +150C (Condition C)	1000 CYS	116	0	ZJ620790BAG
TEMP CYCLE, 5' RAMP, 10' DWELL	1726	90-1557W+P12	-65C TO +150C (Condition C)	500 CYS	50	0	MK418232AAA-REL
TEMP CYCLE, 5' RAMP, 10' DWELL	1726	90-1557W+P12	-65C TO +150C (Condition C)	1000 CYS	50	0	MK418232AAA-REL
TEMP CYCLE, 5' RAMP, 10' DWELL	1726	90-1230B+P70	-65C TO +150C (Condition C)	1000 CYS	49	0	MK418234AAA-REL
TEMP CYCLE, 5' RAMP, 10' DWELL	1726	90-1557W+P12	-65C TO +150C (Condition C)	500 CYS	50	0	MK418236AAA-REL
TEMP CYCLE, 5' RAMP, 10' DWELL	1726	90-1557W+P12	-65C TO +150C (Condition C)	1000 CYS	50	0	MK418236AAA-REL
TEMP CYCLE, 5' RAMP, 10' DWELL	1726	90-1230B+P70	-65C TO +150C (Condition C)	500 CYS	50	0	MK418238AAA-REL
TEMP CYCLE, 5' RAMP, 10' DWELL	1726	90-1230B+P70	-65C TO +150C (Condition C)	1000 CYS	50	0	MK418238AAA-REL
Total:						0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
MOISTURE SOAK	1630	DS1923-F5#	85 C/85% R.H.	1000 HRS	70	0	MK4116444ABB-QAL
MOISTURE SOAK	1630	DS1923-F5#	85 C/85% R.H.	1000 HRS	80	0	MK4116446ABB-QAL
MOISTURE SOAK	1630	DS1923-F5#	85 C/85% R.H.	1000 HRS	80	0	MK411862AAA-2
MOISTURE SOAK	1631	DS1923-F5#	85 C/85% R.H.	1000 HRS	80	0	MK4116445ABB-QAL
MOISTURE SOAK	1632	87-1086U+L00	130C, 85%	96 HRS	80	0	ZJ620790AFG
MOISTURE SOAK	1632	87-1086U+L00	130C, 85%	96 HRS	80	0	ZJ620790BAG
MOISTURE SOAK	1632	87-1086U+L00	130C, 85%	96 HRS	80	0	ZJ620790CAH
MOISTURE SOAK	1726	90-1557W+P12	85C, 85% R.H.	500 HRS	50	0	MK418232AAA-REL
MOISTURE SOAK	1726	90-1557W+P12	85C, 85% R.H.	1000 HRS	50	0	MK418232AAA-REL
MOISTURE SOAK	1726	90-1230B+P70	85C, 85% R.H.	500 HRS	50	0	MK418234AAA-REL
MOISTURE SOAK	1726	90-1230B+P70	85C, 85% R.H.	1000 HRS	50	0	MK418234AAA-REL
MOISTURE SOAK	1726	90-1557W+P12	85C, 85% R.H.	500 HRS	50	0	MK418236AAA-REL
MOISTURE SOAK	1726	90-1557W+P12	85C, 85% R.H.	1000 HRS	50	0	MK418236AAA-REL

MOISTURE SOAK	1726	90-1230B+P70	85C, 85% R.H.	500	HRS	50	0	MK418238AAA-REL
MOISTURE SOAK	1726	90-1230B+P70	85C, 85% R.H.	1000	HRS	50	0	MK418238AAA-REL

Total: **0**

FAILURE RATE: **MTTF (YRS): 1860** **QUANTITY: 80** **FAILS: 0** **FITS: 61.4**