

1/24/2019



**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:

MAX16047ETN+	MAX16050ETI+	MAX9814ETD+	MAXM22511GL
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The calculated failure rate for devices using this process is:

**FAILURE RATE:    MTTF (YRS): 78675    QUANTITY: 430    FAILS: 0    FITS: 1.5**

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 10/1/2018 and 12/31/2018.

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**Process Information:**

Process Description:            San Antonio B8

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**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1740	MAX9814ETD+	135°C	1000 HRS	46	0	TAPZDA084BC
HIGH TEMP OP LIFE	1740	MAX9814ETD+	135°C	500 HRS	48	0	TAPZDA084BC
HIGH TEMP OP LIFE	1740	MAX9814ETD+	135°C	1000 HRS	32	0	TAPZDA084BC
HIGH TEMP OP LIFE	1803	MAX16047ETN+	135°C	1000 HRS	48	0	TFDZCA194CA
HIGH TEMP OP LIFE	1803	MAX16047ETN+	125°C	1000 HRS	42	0	TFDZCA194CA
HIGH TEMP OP LIFE	1806	MAX9814ETD+	135°C	1000 HRS	44	0	TAPZDA087CB
HIGH TEMP OP LIFE	1806	MAX9814ETD+	125°C	1000 HRS	45	0	TAPZDA087CB
HIGH TEMP OP LIFE	1814	MAXM22511GLH+	125°C	1000 HRS	30	0	WBRN7ACA(1)
HIGH TEMP OP LIFE	1814	MAXM22511GLH+	125°C	1000 HRS	20	0	WBRN7ACB(2)
HIGH TEMP OP LIFE	1814	MAXM22511GLH+	125°C	1000 HRS	30	0	WBRN7ACC(3)
HIGH TEMP OP LIFE	1840	MAX9814ETD+	125°C	1000 HRS	45	0	TAPZDA092AA
<b>Total:</b>						<b>0</b>	

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**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1740	MAX9814ETD+	150°C	1000 HRS	80	0	TAPZDA084BC
STORAGE LIFE	1803	MAX16047ETN+	150°C	1000 HRS	80	0	TFDZCA194CA
STORAGE LIFE	1806	MAX9814ETD+	150°C	1000 HRS	36	0	TAPZDA087CB
STORAGE LIFE	1806	MAX9814ETD+	150°C	1000 HRS	78	0	TAPZDA087CB
STORAGE LIFE	1811	MAX16050ETI+	150°C	1000 HRS	80	0	TBVS7A008CA
STORAGE LIFE	1840	MAX9814ETD+	150°C	1000 HRS	80	0	TAPZDA092AA
<b>Total:</b>						<b>0</b>	

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**TEMPERATURE CYCLE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1740	MAX9814ETD+	-65C TO +150C (Condition C)	1000 CYS	80	0	TAPZDA084BC
TEMP CYCLE, 5' RAMP, 10' DWELL	1803	MAX16047ETN+	-65C TO +150C (Condition C)	1000 CYS	80	0	TFDZCA194CA
TEMP CYCLE, 5' RAMP, 10' DWELL	1806	MAX9814ETD+	-65C TO +150C (Condition C)	1000 CYS	80	0	TAPZDA087CB
TEMP CYCLE, 5' RAMP, 10' DWELL	1811	MAX16050ETI+	-65C TO +150C (Condition C)	1000 CYS	80	0	TBVS7A008CA
TEMP CYCLE, 5' RAMP, 10' DWELL	1840	MAX9814ETD+	-65C TO +150C (Condition C)	1000 CYS	80	0	TAPZDA092AA
<b>Total:</b>						<b>0</b>	

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**TEMPERATURE HUMIDITY BIAS**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
BIASED MOISTURE	1740	MAX9814ETD+	85 C/85% R.H.	96 HRS	80	0	TAPZDA084BC
BIASED MOISTURE	1806	MAX9814ETD+	130C, 85% R.H.	96 HRS	80	0	TAPZDA087CB
BIASED MOISTURE	1811	MAX16050ETI+	130C, 85% R.H.	HRS	80	0	TBVS7A008CA
BIASED MOISTURE	1840	MAX9814ETD+	130C, 85% R.H.	96 HRS	80	0	TAPZDA092AA
<b>Total:</b>						<b>0</b>	

**FAILURE RATE: MTTF (YRS): 78675 QUANTITY: 430 FAILS: 0 FITS: 1.5**