

1/24/2019



**RELIABILITY MONITOR REPORT
FOR**

San Antonio S4

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:

MAX13362ATL/ MAX16984SATI/	MAX13366BGTE MAX17823BGC	MAX16932ATIR/ MAX17840AGU	MAX16953AEE/ MAX17843ACB/	MAX16984RATI/ MAX8902AATA
-------------------------------	-----------------------------	------------------------------	------------------------------	------------------------------

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 68211 QUANTITY: 418 FAILS: 0 FITS: 1.7

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.

Process Information:

Process Description: San Antonio S4

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1720	MAX17840AGUN/V+CQ	135°C	1000 HRS	10	0	TAOM5A060CE
HIGH TEMP OP LIFE	1738	MAX17823BGCB/V+CV	135°C	1000 HRS	74	0	TASH6A247A
HIGH TEMP OP LIFE	1806	MAX8902AATA+T	135°C	1000 HRS	80	0	THTZCA344CC
HIGH TEMP OP LIFE	1811	MAX16953AEE/V+	125°C	500 HRS	44	0	TAPT6A083HA
HIGH TEMP OP LIFE	1811	MAX16953AEE/V+	125°C	500 HRS	44	0	TAPT6A083HA
HIGH TEMP OP LIFE	1811	MAX16953AEE/V+	125°C	1000 HRS	44	0	TAPT6A083HB
HIGH TEMP OP LIFE	1811	MAX16953AEE/V+	125°C	500 HRS	44	0	TAPT6A083HB
HIGH TEMP OP LIFE	1821	MAX16984RATI/V+	125°C	1000 HRS	78	0	TAKS1A478A
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1738	MAX17823BGCB/V+CV	150°C	1000 HRS	80	0	TASH6A247A
STORAGE LIFE	1806	MAX8902AATA+T	150°C	1000 HRS	80	0	THTZCA344CC
STORAGE LIFE	1811	MAX16953AEE/V+	150°C	1000 HRS	80	0	TAPT6A083HA
STORAGE LIFE	1811	MAX16953AEE/V+	150°C	1000 HRS	80	0	TAPT6A083HB
STORAGE LIFE	1820	MAX13366BGTE/V+	150°C	1000 HRS	80	0	TBQX8A114DX
STORAGE LIFE	1821	MAX16984RATI/V+	150°C	500 HRS	80	0	TAKS1A478A
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
-------------	-----------	--------------	-----------	-----------	----------	-------	---------

TEMP CYCLE, 5' RAMP, 10' DWELL	1738	MAX17823BGCB/V+CV	-65C TO +150C (Condition C)	1000	CYS	80	0	TASH6A247A
TEMP CYCLE, 5' RAMP, 10' DWELL	1806	MAX8902AATA+T	-65C TO +150C (Condition C)	1000	CYS	78	0	THTZCA344CC
TEMP CYCLE, 5' RAMP, 10' DWELL	1811	MAX16953AEE/V+	-65C TO +150C (Condition C)	1000	CYS	80	0	TAPT6A083HA
TEMP CYCLE, 5' RAMP, 10' DWELL	1811	MAX16953AEE/V+	-65C TO +150C (Condition C)	1000	CYS	80	0	TAPT6A083HB
TEMP CYCLE, 5' RAMP, 10' DWELL	1820	MAX13366BGTE/V+	-65C TO +150C (Condition C)	1000	CYS	78	0	TBQX8A114DX
TEMP CYCLE, 5' RAMP, 10' DWELL	1821	MAX16984RATI/V+	-65C TO +150C (Condition C)	1000	CYS	80	0	TAKS1A478A
TEMP CYCLE, 5' RAMP, 10' DWELL	1821	MAX17843ACB/V+	-65C TO +150C (Condition C)	500	CYS	680	0	TBRN9A004A
Total:							0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
BIASED MOISTURE	1728	MAX13362ATL/V+	130C, 85% R.H.	96	HRS	58	0	TKRZBA111BX
BIASED MOISTURE	1738	MAX17823BGCB/V+CV	85 C/85% R.H.	96	HRS	80	0	TASH6A247A
BIASED MOISTURE	1806	MAX8902AATA+T	130C, 85% R.H.	96	HRS	80	0	THTZCA344CC
BIASED MOISTURE	1820	MAX13366BGTE/V+	130C, 85% R.H.	96	HRS	76	0	TBQX8A114DX
Total:							0	
FAILURE RATE:	MTTF (YRS):	68211	QUANTITY:	418	FAILS:	0	FITS:	1.7