

8/1/2019



**RELIABILITY MONITOR REPORT  
FOR**

**San Antonio EC8**

**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:

90-1230Y+07I	DS1685S-3+	DS32KHZ
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The calculated failure rate for devices using this process is:

**FAILURE RATE: MTTF (YRS): 15503 QUANTITY: 80 FAILS: 0 FITS: 7.4**

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 4/1/2019 and 8/1/2019 .

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**Process Information:**

Process Description: San Antonio EC8

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**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE		DS1685S-3+	125°C	1000 HRS	80	0	FK744420ADD
<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		DS1685S-3+	150°C	1000 HRS	80	0	FK744420ADD
STORAGE LIFE		90-1230Y+07I	150°C	1000 HRS	80	0	MK429520AAA-QAL
STORAGE LIFE	1831	DS32KHZ	150°C	1000 HRS	79	0	FS802470ABC-ENG
STORAGE LIFE	1831	DS32KHZ	150°C	1000 HRS	80	0	FS802470ADC-ENG
STORAGE LIFE	1832	DS32KHZ	150°C	1000 HRS	79	0	FS802470ACC-ENG
STORAGE LIFE	1914	90-1230Y+07I	150°C	1000 HRS	80	0	MK429519AAA-QAL
<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		DS1685S-3+	-65C TO +150C (Condition C)	1000 CYS	80	0	FK744420ADD
TEMP CYCLE, 5' RAMP, 10' DWELL		90-1230Y+07I	-65C TO +150C (Condition C)	1000 CYS	80	0	MK429520AAA-QAL
TEMP CYCLE, 5' RAMP, 10' DWELL	1831	DS32KHZ	-65C TO +150C (Condition C)	1000 CYS	86	0	FS802470ABC-ENG
TEMP CYCLE, 5' RAMP, 10' DWELL	1831	DS32KHZ	-65C TO +150C (Condition C)	1000 CYS	86	0	FS802470ADC-ENG

TEMP CYCLE, 5' RAMP, 10' DWELL	1832	DS32KHZ	-65C TO +150C (Condition C)	1000	CYS	82	0	FS802470ACC-ENG
TEMP CYCLE, 5' RAMP, 10' DWELL	1914	90-1230Y+07I	-65C TO +150C (Condition C)	1000	CYS	80	0	MK429519AAA-QAL
<b>Total:</b>							<b>0</b>	

#### TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
BIASED MOISTURE		DS1685S-3+	130C, 85% R.H.	96	HRS	80	0	FK744420ADD
BIASED MOISTURE		90-1230Y+07I	85 C/85% R.H.	1000	HRS	80	0	MK429520AAA-QAL
BIASED MOISTURE	1914	90-1230Y+07I	85 C/85% R.H.	1000	HRS	80	0	MK429519AAA-QAL
<b>Total:</b>							<b>0</b>	

#### UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
MOISTURE SOAK	1831	DS32KHZ	130C, 85% R.H.	96	HRS	80	0	FS802470ABC-ENG
MOISTURE SOAK	1831	DS32KHZ	130C, 85% R.H.	96	HRS	80	0	FS802470ADC-ENG
MOISTURE SOAK	1832	DS32KHZ	130C, 85% R.H.	96	HRS	80	0	FS802470ACC-ENG
<b>Total:</b>							<b>0</b>	

**FAILURE RATE:      MTF (YRS): 15503      QUANTITY: 80      FAILS: 0      FITS: 7.4**