

4/16/2014



**RELIABILITY MONITOR REPORT  
FOR**

**MFN 0.18 $\mu$ m Silicon Gate CMOS (S18)**

**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:

MAX8959EWG+	MAX8959EWG+	MAX9832ETG+	MAX98400AET
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The calculated failure rate for devices using this process is:

**FAILURE RATE:    MTTF (YRS): 85652    QUANTITY: 442    FAILS: 0    FITS: 1.3**

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 4/1/2013 and 3/31/2014 .

**Process Information:**

Process Description:            MFN 0.18µm Silicon Gate CMOS (S18)

**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1303	MAX8959EWG+T	135°C	1000 HRS	16	0	JAJI8Z003A#
HIGH TEMP OP LIFE	1304	MAX98400AETX+	135°C	1000 HRS	120	0	JAJC7Z003S#
HIGH TEMP OP LIFE	1317	MAX98400AETX+	135°C	1000 HRS	77	0	JAJC74007BA
HIGH TEMP OP LIFE	1325	MAX9832ETG+	135°C	1000 HRS	149	0	JAJC12008U
HIGH TEMP OP LIFE	N/A	MAX8959EWG+T	135°C	1000 HRS	80	0	JAJI83010A#
<b>Total:</b>						<b>0</b>	

**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1303	MAX8959EWG+T	150°C	1000 HRS	80	0	JAJI8Z003A#
STORAGE LIFE	1304	MAX98400AETX+	150°C	1000 HRS	77	0	JAJC7Z003S#
STORAGE LIFE	1317	MAX98400AETX+	150°C	1000 HRS	80	0	JAJC74007BA
STORAGE LIFE	1325	MAX9832ETG+	150°C	1000 HRS	79	0	JAJC12008U
STORAGE LIFE	N/A	MAX8959EWG+T	150°C	1000 HRS	80	0	JAJI83010A#
<b>Total:</b>						<b>0</b>	

**TEMPERATURE CYCLE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 15' RAMP, 15' DWELL	1303	MAX8959EWG+T	-40C TO +125C	500 CYS	77	0	JAJI8Z003A#
TEMP CYCLE, 5' RAMP, 10' DWELL	1317	MAX98400AETX+	-65C TO 150C	500 CYS	80	0	JAJC74007BA
TEMP CYCLE, 5' RAMP, 10' DWELL	1325	MAX9832ETG+	-65C TO 150C	500 CYS	80	0	JAJC12008U

TEMP CYCLE, 5' RAMP, N/A 10' DWELL	MAX8959EWG+	-65C TO 150C	500	CYS	80	0	JAJI8Z003
TEMP CYCLE, 5' RAMP, N/A 10' DWELL	MAX8959EWG+T	-65C TO 150C	500	CYS	80	0	JAJI83010A#
<b>Total:</b>						<b>0</b>	

**TEMPERATURE HUMIDITY BIAS**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
BIASED MOISTURE	1317	MAX98400AETX+	130C, 85% R.H.	100	HRS	80	0 JAJC74007BA
BIASED MOISTURE	1325	MAX9832ETG+	130C, 85% R.H.	100	HRS	80	0 JAJC12008U

**Total: 0**

**FAILURE RATE: MTTF (YRS): 85652 QUANTITY: 442 FAILS: 0 FITS: 1.3**