

4/17/2013



**RELIABILITY MONITOR REPORT
FOR**

FAB-101 0.18μm 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:

MAX77179EWC	MAX77609EWJ+	MAX77609EWJ+	MAX77693EWQ	MAX77693EWQ
MAX77802EWW	MAX8955E/DW	MAX8957BEWI	MAX8957EWI+T	MAX8957TEWI+
MAX8967EWW+	MAX8997EWW+	MAX98096EWF	MAX98711EWW	

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 19234 QUANTITY: 536 FAILS: 1 FITS: 5.9

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 4/1/2012 and 3/31/2013 .

Process Information:

Process Description: FAB-101 0.18µm Silicon Gate CMOS (S18)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE		MAX8997EWW+T	135°C	1000 HRS	48	0	VW3ZEA556B
HIGH TEMP OP LIFE	1206	MAX8957BEWI+T	135°C	192 HRS	46	0	VADE0A004AQ
HIGH TEMP OP LIFE	1210	MAX77693EWQ+T	135°C	192 HRS	47	0	VAFK7A009AQ
HIGH TEMP OP LIFE	1222	MAX98096EWF+	135°C	1000 HRS	47	0	VAHH8Q002AQ
HIGH TEMP OP LIFE	1223	MAX8955E/DW+	135°C	568 HRS	80	0	VAGP8A009AQ
HIGH TEMP OP LIFE	1239	MAX77179EWC+T	135°C	192 HRS	48	0	V8RZAQ002CQ
HIGH TEMP OP LIFE	1240	MAX77609EWJ+	135°C	240 HRS	50	0	VAFO7Q003AQ
HIGH TEMP OP LIFE	1241	MAX8967EWW+T	135°C	192 HRS	48	0	VAJM9A004BQ
HIGH TEMP OP LIFE	1241	MAX98711EWW+T	135°C	312 HRS	77	1	VAJI7Q001AQ
HIGH TEMP OP LIFE	1252	MAX77802EWW+T	135°C	192 HRS	45	0	VALB0A005BQ
Total:						1	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1229	MAX8997EWW+T	150°C	500 HRS	77	1	VW3ZDQ002B#
STORAGE LIFE	1229	MAX8997EWW+T	150°C	1000 HRS	77	0	VW3ZDQ002BA
STORAGE LIFE	1229	MAX8997EWW+T	150°C	500 HRS	77	1	VW3ZDQ002BB
STORAGE LIFE	1241	MAX98711EWW+T	150°C	1000 HRS	77	0	VAJI7Q001C#
STORAGE LIFE	N/A	MAX8957TEWI+T	150°C	1000 HRS	68	1	VADE0A004C
STORAGE LIFE	N/A	MAX8957TEWI+T	150°C	1000 HRS	77	0	VADE0A004D
STORAGE LIFE	N/A	MAX8957TEWI+T	150°C	1000 HRS	77	0	VADE0A004E

STORAGE LIFE	N/A	MAX98711EWV+T	150°C	1000 HRS	77	0	VAJI7Q001AC
					Total:	3	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 15' RAMP, 15' DWELL		MAX8957TEWI+T	-40C TO +125C	410 CYS	77	0	VADE0Q002A
TEMP CYCLE, 15' RAMP, 15' DWELL		MAX8957TEWI+T	-40C TO +125C	410 CYS	77	0	VADE0Q002C
TEMP CYCLE, 15' RAMP, 15' DWELL		MAX8957TEWI+T	-40C TO +125C	500 CYS	77	1	VADE0Q002C#
TEMP CYCLE, 15' RAMP, 15' DWELL		MAX8957TEWI+T	-40C TO +125C	410 CYS	77	1	VADE0Q002D
TEMP CYCLE, 15' RAMP, 15' DWELL		MAX77693EWQ+	-40C TO +125C	500 CYS	330	0	VAKX5A889A#
TEMP CYCLE, 15' RAMP, 15' DWELL	1241	MAX77609EWJ+T	-40C TO +125C	500 CYS	77	1	VAFO7A004A#
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8957EWI+T	-40C TO +125C	500 CYS	77	1	VADE0A004C
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8957TEWI+T	-40C TO +125C	500 CYS	73	0	VADE0A004D
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8957TEWI+T	-40C TO +125C	500 CYS	76	0	VADE0A004E
					Total:	4	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
MOISTURE SOAK	N/A	MAX98711EWV+T	85 C/85% R.H.	168 HRS	76	0	VAJI7Q001C#
MOISTURE SOAK	N/A	MAX98711EWV+T	85 C/85% R.H.	264 HRS	77	0	VAJI7Q001A#
MOISTURE SOAK	N/A	MAX98711EWV+T	130C, 85% R.H.	100 HRS	77	0	VAJI7Q001AC
MOISTURE SOAK	N/A	MAX98711EWV+T	85 C/85% R.H.	168 HRS	77	1	VAJI7Q002A#
					Total:	1	

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