



4/17/2012

RELIABILITY MONITOR REPORT
FOR

FAB-101 Silicon Gate CMOS (S18)

MAXIM Integrated Products

120 San Gabriel Dr.
Sunnyvale, CA 94086

This Report was prepared by
Maxim 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:

MAX7370ATG+	MAX77686EWE	MAX8959EWG+	MAX8968EWL+	MAX8971EWP+
MAX8971EWP+	MAX8997EWW+	MAX98095EWG		

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 43268 QUANTITY: 542 FAILS: 0 FITS: 2.6

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 4/1/2011 and 3/31/2012 .

Process Information:

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

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1114	MAX7370ATG+	135C	192 HRS	79	0	VY0ZAQ001DQ
HIGH TEMP OP LIFE	1133	MAX8959EWG+T	135C	500 HRS	45	0	VR2ZG2144AC
HIGH TEMP OP LIFE	1139	MAX8968EWL+CBF	135C	500 HRS	48	0	VX2YBA006AQ
HIGH TEMP OP LIFE	1143	MAX8971EWP+T	135C	192 HRS	50	0	VAAU8A006AQ
HIGH TEMP OP LIFE	1143	MAX98095EWG	135C	500 HRS	45	0	V5AZAQ002CA
HIGH TEMP OP LIFE	1145	MAX8959EWG+T	135C	192 HRS	45	0	VR2ZG2238AC
HIGH TEMP OP LIFE	1146	MAX8959EWG+T	135C	192 HRS	45	0	VR2ZG2239AG
HIGH TEMP OP LIFE	1149	MAX8971EWP+	135C	192 HRS	48	0	VADF6A005AQ
HIGH TEMP OP LIFE	1205	MAX77686EWE+T	135C	240 HRS	48	0	VAEC0Q003BQ
HIGH TEMP OP LIFE	N/A	MAX8959EWG+T	135C	1000 HRS	44	0	VR2ZGQ001I
HIGH TEMP OP LIFE	N/A	MAX8959EWG+T	135C	1000 HRS	45	0	VR2ZGA231CB
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	N/A	MAX8997EWW+T	150C	1000 HRS	76	0	VW3ZCQ001I
STORAGE LIFE	N/A	MAX8997EWW+T	150C	1000 HRS	70	0	VW3ZCQ001J
STORAGE LIFE	N/A	MAX8997EWW+T	150C	1000 HRS	72	0	VW3ZCQ001H
STORAGE LIFE	N/A	MAX8997EWW+T	150C	1000 HRS	75	0	VW3ZDA034AF
STORAGE LIFE	N/A	MAX8997EWW+T	150C	500 HRS	77	0	VW3ZDA034AG
STORAGE LIFE	N/A	MAX8997EWW+T	150C	500 HRS	77	0	VW3ZDA034AH

STORAGE LIFE	N/A	MAX8997EWW+T	150C	1000 HRS	76	0	VW3ZDA034
STORAGE LIFE	N/A	MAX8997EWW+T	150C	1000 HRS	77	0	VW3ZEA556B
STORAGE LIFE	N/A	MAX8997EWW+T	150C	1000 HRS	77	0	VW3ZEA556C
STORAGE LIFE	N/A	MAX8997EWW+T	150C	1000 HRS	77	0	VW3ZEA556D
STORAGE LIFE	N/A	MAX8959EWG+T	150C	1000 HRS	77	0	VR2ZGA231BB
STORAGE LIFE	N/A	MAX8959EWG+T	150C	1024 HRS	77	0	VR2ZGA231CB
STORAGE LIFE	N/A	MAX8959EWG+T	150C	1024 HRS	77	0	VR2ZGA231DB
STORAGE LIFE	N/A	MAX98095EWG	150C	1048 HRS	77	0	V0VZBQ003AG
STORAGE LIFE	N/A	MAX98095EWG	150C	1048 HRS	77	0	V0VZBQ003AI
STORAGE LIFE	N/A	MAX98095EWG	150C	1048 HRS	77	0	V0VZBQ003AK
STORAGE LIFE	N/A	MAX98095EWG	150C	1000 HRS	77	0	V5AZAQ002CA
STORAGE LIFE	N/A	MAX98095EWG	150C	1000 HRS	77	0	V5AZAQ002AA
STORAGE LIFE	N/A	MAX98095EWG	150C	1000 HRS	77	0	V5AZAQ002BA
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8959EWG+T	-40C TO +125C	1000 CYS	77	0	VR2ZGQ001K
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8997EWW+T	-40C TO +125C	500 CYS	76	0	VW3ZCQ001I
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8997EWW+T	-40C TO +125C	500 CYS	72	0	VW3ZCQ001J
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8997EWW+T	-40C TO +125C	500 CYS	74	0	VW3ZCQ001H
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8997EWW+T	-40C TO +125C	500 CYS	71	0	VW3ZCQ001C
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8997EWW+T	-40C TO +125C	500 CYS	77	0	VW3ZCQ001D
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8997EWW+T	-40C TO +125C	500 CYS	77	0	VW3ZCQ001E
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8997EWW+T	-40C TO +125C	1000 CYS	77	0	VW3ZDA034AF
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8997EWW+T	-40C TO +125C	1000 CYS	76	0	VW3ZDA034AG
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8997EWW+T	-40C TO +125C	1000 CYS	77	0	VW3ZDA083B
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8997EWW+T	-40C TO +125C	1000 CYS	77	0	VW3ZDA083BC
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8997EWW+T	-40C TO +125C	1000 CYS	77	0	VW3ZDA083BD
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8997EWW+T	-40C TO +125C	500 CYS	77	0	VW3ZEA556B
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8997EWW+T	-40C TO +125C	500 CYS	77	0	VW3ZEA556C

TEMP CYCLE, 5' RAMP, 10' DWELL	N/A	MAX8997EWW+T	-65C TO 150C	500	CYS	77	0	VW3ZEA556C
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8997EWW+T	-40C TO +125C	500	CYS	77	0	VW3ZEA556D
TEMP CYCLE, 5' RAMP, 10' DWELL	N/A	MAX8997EWW+T	-65C TO 150C	500	CYS	77	0	VW3ZEA556D
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8959EWG+T	-40C TO +125C	500	CYS	77	0	VR2ZGA231BB
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8959EWG+T	-40C TO +125C	500	CYS	77	0	VR2ZGA231CB
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX8959EWG+T	-40C TO +125C	500	CYS	77	0	VR2ZGA231DB
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX98095EWG	-40C TO +125C	500	CYS	77	0	V0VZBQ003AI
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX98095EWG	-40C TO +125C	500	CYS	77	0	V5AZAQ002CA
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX98095EWG	-40C TO +125C	500	CYS	77	0	V5AZAQ002AA
TEMP CYCLE, 5' RAMP, 10' DWELL	N/A	MAX98095EWG	-65C TO 150C	500	CYS	77	0	V5AZAQ002AA
TEMP CYCLE, 15' RAMP, 15' DWELL	N/A	MAX98095EWG	-40C TO +125C	500	CYS	77	0	V5AZAQ002BA
TEMP CYCLE, 5' RAMP, 10' DWELL	N/A	MAX98095EWG	-65C TO 150C	500	CYS	77	0	V5AZAQ002BA

Total: 0

FAILURE RATE: MTTF (YRS): 43268 QUANTITY: 542 FAILS: 0 FITS: 2.6