



5/9/2009

RELIABILITY MONITOR REPORT
FOR

TSMC 0.35 μ m Silicon Gate CMOS

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:

MAX1446EHJ+	MAX4751EGE+	MAX7033EUI+	MAX7034AUI+	MAX9246EUM+
MAX9257GTL+				

The calculated failure rate for devices using this process is:

FAILURE RATE: **MTTF (YRS): 23276** **FITS: 4.9**

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 1/1/2008 and 12/31/2008.

Process Information:

Process Description: TSMC 0.35µm Silicon Gate CMOS

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	0737	MAX1446EHJ+	135C	1000 HRS	78	0	Q43CCA016C#
HIGH TEMP OP LIFE	0742	MAX9257GTL+	135C	192 HRS	55	0	QGFZCQ001EQ
HIGH TEMP OP LIFE	0804	MAX7034AUI+	135C	700 HRS	45	0	QINZAQ003D#
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	0737	MAX1446EHJ+	150C	1000 HRS	43	0	Q43CCA016C#
STORAGE LIFE	0801	MAX9246EUM+	150C	1000 HRS	44	0	QR32AA005E#
STORAGE LIFE	0804	MAX7034AUI+	150C	1000 HRS	80	0	QINZAQ003D#
STORAGE LIFE	0818	MAX7033EUI+	150C	1000 HRS	80	0	QPM0BA006Q1
STORAGE LIFE	0818	MAX7033EUI+	150C	1000 HRS	79	0	QPM0BA006Q2
STORAGE LIFE	0818	MAX7033EUI+	150C	1000 HRS	79	0	QPM0BA006Q3
STORAGE LIFE	0819	MAX9246EUM+	150C	1000 HRS	80	0	QR32AA007Q1
STORAGE LIFE	0819	MAX9246EUM+	150C	500 HRS	80	0	QR32AA007Q2
STORAGE LIFE	0819	MAX9246EUM+	150C	1000 HRS	80	0	QR32AA007Q32
STORAGE LIFE	0819	MAX9246EUM+	150C	1000 HRS	80	0	QR32AA007Q3
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	073	MAX1446EHJ+	-65C TO 150C	1000 CYS	80	0	Q43CCA016C#

TEMP CYCLE, 5' RAMP, 10' DWELL	0804	MAX7034AUI+	-65C TO 150C	500	CYS	80	0	QINZAQ003D#
TEMP CYCLE, 5' RAMP, 10' DWELL	0818	MAX4751EGE+	-65C TO 150C	497	CYS	77	0	Q7T0CA038AD
TEMP CYCLE, 5' RAMP, 10' DWELL	0818	MAX4751EGE+	-65C TO 150C	497	CYS	77	0	Q7T0CA038AE
TEMP CYCLE, 5' RAMP, 10' DWELL	0818	MAX4751EGE+	-65C TO 150C	497	CYS	77	0	Q7T0CA038AF
TEMP CYCLE, 5' RAMP, 10' DWELL	0818	MAX7033EUI+	-65C TO 150C	900	CYS	80	0	QPM0BA006Q1
TEMP CYCLE, 5' RAMP, 10' DWELL	0818	MAX7033EUI+	-65C TO 150C	900	CYS	80	0	QPM0BA006Q2
TEMP CYCLE, 5' RAMP, 10' DWELL	0818	MAX7033EUI+	-65C TO 150C	900	CYS	80	0	QPM0BA006Q3
TEMP CYCLE, 5' RAMP, 10' DWELL	0819	MAX9246EUM+	-65C TO 150C	1000	CYS	80	0	QR32AA007Q1
TEMP CYCLE, 5' RAMP, 10' DWELL	0819	MAX9246EUM+	-65C TO 150C	1000	CYS	80	0	QR32AA007Q2
TEMP CYCLE, 5' RAMP, 10' DWELL	0819	MAX9246EUM+	-65C TO 150C	1000	CYS	80	0	QR32AA007Q3

Total: 0

FAILURE RATE: MTTF (YRS): 23276 FITS: 4.9