



4/8/2009

**RELIABILITY MONITOR REPORT
FOR**

DAL 2.0 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:

DS1283	DS1284
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The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 32431 FITS: 3.5

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 7/1/2007 and 6/30/2008 .

Process Information:

Process Description: DAL 2.0µm Silicon Gate CMOS

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
VISUAL INSPECTION	0716	DS1283	WHISKERS < 50uM		45	0	ZE308221AD-QUAL
HIGH TEMP OP LIFE	0716	DS1283	125C, 5.0 VOLTS	1000 HRS	45	0	ZE308221AD-QUAL
HIGH TEMP OP LIFE	0810	DS1284	125C, 7.0 VOLTS	1000 HRS	77	0	ZQ732115AC
HIGH TEMP OP LIFE	0810	DS1284	125C, 7.0 VOLTS	1000 HRS	77	0	ZQ732115AD
HIGH TEMP OP LIFE	0810	DS1284	125C, 7.0 VOLTS	1000 HRS	77	0	ZQ732115AE
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	0716	DS1283	150C	1000 HRS	77	0	ZE308221AD-QUAL
VISUAL INSPECTION	0716	DS1283	WHISKERS < 50uM		77	0	ZE308221AD-QUAL
STORAGE LIFE	0810	DS1284	150C	1000 HRS	77	0	ZQ732115AC
STORAGE LIFE	0810	DS1284	150C	1000 HRS	77	0	ZQ732115AD
STORAGE LIFE	0810	DS1284	150C	1000 HRS	77	0	ZQ732115AE
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
VISUAL INSPECTION	0716	DS1283	WHISKERS < 50uM		77	0	ZE308221AD-QUAL
TEMP CYCLE, 5' RAMP, 10' DWELL	0716	DS1283	-55C TO 125C	1000 CYS	77	0	ZE308221AD-QUAL

TEMP CYCLE, 5' RAMP, 10' DWELL	0810	DS1284	-55C TO 125C	1000	CYS	77	0	ZQ732115AC
TEMP CYCLE, 5' RAMP, 10' DWELL	0810	DS1284	-55C TO 125C	1000	CYS	77	0	ZQ732115AD
TEMP CYCLE, 5' RAMP, 10' DWELL	0810	DS1284	-55C TO 125C	1000	CYS	77	0	ZQ732115AE
Total:							0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
VISUAL INSPECTION	0716	DS1283	WHISKERS < 50uM			77	0 ZE308221AD-QUAL	
HAST	0716	DS1283	130C, 85%R.H.,3.5V	96	HRS	77	0 ZE308221AD-QUAL	
BIASED MOISTURE	0810	DS1284	85/85, 5.5 VOLTS	1000	HRS	77	0 ZQ732115AC	
BIASED MOISTURE	0810	DS1284	85/85, 5.5 VOLTS	1000	HRS	77	0 ZQ732115AD	
BIASED MOISTURE	0810	DS1284	85/85, 5.5 VOLTS	1000	HRS	77	0 ZQ732115AE	
Total:							0	

FAILURE RATE: **MTTF (YRS): 32431** **FITS: 3.5**