



4/20/2008

RELIABILITY MONITOR REPORT
FOR

DAL 0.35 μ m "D" 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:

DS1080L	DS1081L	DS2155
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The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 28671 FITS: 4.0

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 4/1/2007 and 3/31/2008 .

Process Information:

Process Description: DAL 0.35µm "D" Silicon Gate CMOS

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0701	DS1081L	125C, 3.6 VOLTS	1000 HRS	45	0	
HIGH TEMP OP LIFE	0709	DS2155	125C, 3.5 VOLTS	1000 HRS	77	0	
HIGH TEMP OP LIFE	0712	DS2155	125C, 3.5 VOLTS	1000 HRS	77	0	
HIGH TEMP OP LIFE	0732	DS1080L	125C, 3.6 VOLTS	1000 HRS	45	0	
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0732	DS1080L	150C	1000 HRS	55	0	
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE, 5' RAMP, 10' DWELL	0709	DS2155	-55C TO 125C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	0712	DS2155	-55C TO 125C	1000 CYS	75	0	
BOND STRENGTH	0732	DS1080L	MIL-STD-883-2011 : COND D	40 WIRES	5	0	
TEMP CYCLE, 5' RAMP, 10' DWELL			-65C TO 150C	500 CYS	77	0	
Total:						0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HAST	0709	DS2155	130C, 85%R.H.,3.5V	96 HRS	45	0	
HAST	0712	DS2155	130C, 85%R.H.,3.5V	96 HRS	45	0	

HAST	0732	DS1080L	130C, 85%R.H.,3.5V	96	HRS	77	0
Total:							0

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
AUTOCLAVE	0732	DS1080L	121C, 2 ATM STEAM, UNBIASED	168	HRS	77	0
Total:							0

FAILURE RATE: MTTF (YRS): 28671 FITS: 4.0