

4/17/2013



**RELIABILITY MONITOR REPORT
FOR**

Dallas 0.35 μ m "D" Silicon Gate CMOS (D35)

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:

DS1081L

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 12298 QUANTITY: 231 FAILS: 1 FITS: 9.3

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: Dallas 0.35µm "D" Silicon Gate CMOS (D35)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1215	DS1081L	125C, 3.6 VOLTS	1000 HRS	77	0	VJ903554BB
HIGH TEMP OP LIFE	1223	DS1081L	125C, 3.6 VOLTS	1000 HRS	77	1	VK907363AB
HIGH TEMP OP LIFE	1223	DS1081L	125C, 3.6 VOLTS	1000 HRS	77	0	VK909533BD
Total:						1	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1215	DS1081L	150°C	1000 HRS	50	0	VJ903554BB
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1215	DS1081L	-65C TO 150C	500 CYS	77	0	VJ903554BB
TEMP CYCLE, 5' RAMP, 10' DWELL	1215	DS1081L	-65C TO 150C	500 CYS	77	1	VJ903554BC
TEMP CYCLE, 5' RAMP, 10' DWELL	1217	DS1081L	-65C TO 150C	500 CYS	77	1	VJ903554BD
TEMP CYCLE, 5' RAMP, 10' DWELL	1223	DS1081L	-65C TO 150C	500 CYS	77	0	VK907363AB
TEMP CYCLE, 5' RAMP, 10' DWELL	1223	DS1081L	-65C TO 150C	500 CYS	77	0	VK909533BD
Total:						2	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
HAST	1215	DS1081L	130C, 85%R.H., 3.5V	96	HRS	77	0	VJ903554BB
HAST	1215	DS1081L	130C, 85%R.H., 3.5V	96	HRS	77	0	VJ903554BC
HAST	1215	DS1081L	130C, 85%R.H., 3.5V	96	HRS	77	0	VJ903554BB
HAST	1217	DS1081L	130C, 85%R.H., 3.5V	96	HRS	77	0	VJ903554BD
HAST	1223	DS1081L	130C, 85%R.H., 3.5V	96	HRS	77	0	VK907363AB
HAST	1223	DS1081L	130C, 85%R.H., 3.5V	96	HRS	77	0	VK909533BD
Total:							0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
HAST, NO BIAS	1215	DS1081L	130C, 85% R.H.	96	HRS	72	0	VJ903554BB
HAST, NO BIAS	1215	DS1081L	130C, 85% R.H.	96	HRS	77	0	VJ903554BC
HAST, NO BIAS	1215	DS1081L	130C, 85% R.H.	96	HRS	77	0	VJ903554BB
HAST, NO BIAS	1217	DS1081L	130C, 85% R.H.	96	HRS	77	0	VJ903554BD
HAST, NO BIAS	1223	DS1081L	130C, 85% R.H.	96	HRS	77	0	VK907363AB
HAST, NO BIAS	1223	DS1081L	130C, 85% R.H.	96	HRS	77	0	VK909533BD
Total:							0	

FAILURE RATE: **MTTF (YRS): 12298** **QUANTITY: 231** **FAILS: 1** **FITS: 9.3**