



5/9/2009

**RELIABILITY MONITOR REPORT  
FOR**

**Dallas B8 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:

DS2413	DS3510	DS3514
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The calculated failure rate for devices using this process is:

**FAILURE RATE:**                      **MTTF (YRS): 27143**                      **FITS: 4.2**

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 4/1/2008 and 3/31/2009 .

**Process Information:**

Process Description:                      Dallas B8 Silicon Gate CMOS

**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	0747	DS3510	125C, 5.5 V (PSA) & 15.0 V (PSB)	1000 HRS	77	0	QJ712635BA
HIGH TEMP OP LIFE	0747	DS3510	125C, 5.5 V (PSA) & 15.0 V (PSB)	1000 HRS	77	0	QJ712635BA
HIGH TEMP OP LIFE	0833	DS3514	125C, 5.5 V (PSA) & 15.0 V (PSB)	1000 HRS	77	0	QJ803644BA-NPI
<b>Total:</b>						<b>0</b>	

**TEMPERATURE CYCLE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	0821	DS2413	-55C TO 125C	2000 CYS	77	0	QJ816087AEA
TEMP CYCLE, 5' RAMP, 10' DWELL	0821	DS2413	-55C TO 125C	2000 CYS	77	0	QJ821113AEA
TEMP CYCLE, 5' RAMP, 10' DWELL	0821	DS2413	-55C TO 125C	1000 CYS	77	0	QJ823334ACA
<b>Total:</b>						<b>0</b>	

**TEMPERATURE HUMIDITY BIAS**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HAST	0821	DS2413	130C, 85%R.H.,3.5V	96 HRS	45	0	QJ816087AEA
HAST	0821	DS2413	130C, 85%R.H.,3.5V	96 HRS	45	0	QJ821113AEA
HAST	0821	DS2413	130C, 85%R.H.,3.5V	96 HRS	45	0	QJ823334ACA
<b>Total:</b>						<b>0</b>	

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**W/E ENDURANCE AND DATA RET'N**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
WRITE CYCLE STRESS (KCYS)	0833	DS3514	70 C, 5.5V (PSA) & 15.0V (PSB)	50 KCYS	77	0	QJ803644BA-NPI
STORAGE LIFE	0833	DS3514	150C	1000 HRS	77	0	QJ803644BA-NPI
<b>Total:</b>						<b>0</b>	

**FAILURE RATE:****MTTF (YRS): 27143****FITS: 4.2**