

4/23/2015



**RELIABILITY MONITOR REPORT
FOR**

Epson 0.6 μ m Silicon Gate (C6Y)

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:

MAX1258BETM	MAX5048AAUT	MAX5048BAUT
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The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 41857 QUANTITY: 352 FAILS: 0 FITS: 2.7

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 4/1/2014 and 3/31/2015 .

Process Information:

Process Description: Epson 0.6µm Silicon Gate (C6Y)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1418	MAX5048BAUT+T	135°C	500 HRS	48	0	EAJG0A018Q1
HIGH TEMP OP LIFE	1418	MAX5048BAUT+T	135°C	1000 HRS	80	0	EAJG0A018Q1
HIGH TEMP OP LIFE	1418	MAX5048BAUT+T	135°C	1000 HRS	80	0	EAJG0A018Q2
HIGH TEMP OP LIFE	1418	MAX5048BAUT+T	135°C	500 HRS	48	0	EAJG0A018Q3
HIGH TEMP OP LIFE	1418	MAX5048BAUT+T	135°C	1000 HRS	48	0	EAJG0A018Q3
HIGH TEMP OP LIFE	1418	MAX5048BAUT+T	135°C	500 HRS	48	0	EAJG0A018Q3
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1418	MAX5048BAUT+T	150°C	1000 HRS	80	0	EAJG0A018Q1
STORAGE LIFE	1418	MAX5048BAUT+T	150°C	1000 HRS	80	0	EAJG0A018Q2
STORAGE LIFE	1418	MAX5048BAUT+T	150°C	1000 HRS	80	0	EAJG0A018Q3
STORAGE LIFE	1427	MAX1258BETM+	150°C	1000 HRS	80	0	EEQ0KA146A
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1416	MAX5048BAUT+T	-65C TO +150C (Condition C)	1000 CYS	80	0	EAJG0A018Q1
TEMP CYCLE, 5' RAMP, 10' DWELL	1418	MAX5048BAUT+T	-65C TO +150C (Condition C)	1000 CYS	80	0	EAJG0A018Q1

TEMP CYCLE, 5' RAMP, 10' DWELL	1418	MAX5048BAUT+T	-65C TO +150C (Condition C)	1000	CYS	80	0	EAJG0A018Q2
TEMP CYCLE, 5' RAMP, 10' DWELL	1418	MAX5048BAUT+T	-65C TO +150C (Condition C)	1000	CYS	80	0	EAJG0A018Q2
TEMP CYCLE, 5' RAMP, 10' DWELL	1418	MAX5048BAUT+T	-65C TO +150C (Condition C)	1000	CYS	80	1	EAJG0A018Q3
TEMP CYCLE, 5' RAMP, 10' DWELL	1418	MAX5048BAUT+T	-65C TO +150C (Condition C)	1000	CYS	80	0	EAJG0A018Q3
TEMP CYCLE, 5' RAMP, 10' DWELL	1427	MAX1258BETM+	-65C TO +150C (Condition C)	500	CYS	80	0	EEQ0KA146A
TEMP CYCLE, 5' RAMP, 10' DWELL	2013	MAX5048AAUT#TG16	-65C TO +150C (Condition C)	1000	CYS	77	0	EAJF9Q002D#
TEMP CYCLE, 5' RAMP, 10' DWELL	2013	MAX5048AAUT#TG16	-65C TO +150C (Condition C)	1000	CYS	77	0	EAJF9Q003F#
TEMP CYCLE, 5' RAMP, 10' DWELL	2014	MAX5048BAUT+T	-65C TO +150C (Condition C)	1000	CYS	77	0	EAJG0A032C#
TEMP CYCLE, 5' RAMP, 10' DWELL	2014	MAX5048BAUT+T	-65C TO +150C (Condition C)	1000	CYS	77	0	EAJG0A027A#
TEMP CYCLE, 5' RAMP, 10' DWELL	2014	MAX5048BAUT+T	-65C TO +150C (Condition C)	1000	CYS	77	0	EAJG0A033A#
Total:							1	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
BIASED MOISTURE	1418	MAX5048BAUT+T	130C, 85% R.H.	100	HRS	80	0	EAJG0A018Q1
BIASED MOISTURE	1418	MAX5048BAUT+T	130C, 85% R.H.	100	HRS	80	0	EAJG0A018Q2
BIASED MOISTURE	1418	MAX5048BAUT+T	130C, 85% R.H.	100	HRS	78	0	EAJG0A018Q3
Total:							0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
MOISTURE SOAK	1418	MAX5048BAUT+T	130C, 85% R.H.	300	HRS	76	0	EAJG0A018Q1
MOISTURE SOAK	1418	MAX5048BAUT+T	130C, 85% R.H.	300	HRS	79	0	EAJG0A018Q2
MOISTURE SOAK	1418	MAX5048BAUT+T	130C, 85% R.H.	300	HRS	79	0	EAJG0A018Q3
Total:							0	

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