

1/24/2019



**RELIABILITY MONITOR REPORT
FOR**

MFN B8

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:

MAX13085EESA	MAX13089EESD	MAX16826ATJ+	MAX3295AUT+	MAX5961ETM+
MAX6414UK31/	MAX6747KA30/	MAX6750KA30/	MAX6895AAZT/	MAX77843EWW
MAX8538EEI+	MAX9025EWT+	MAX9634FEWS	MAX9634HEWS	MAX9938FELT+

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 170528 QUANTITY: 960 FAILS: 0 FITS: 0.7

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 10/1/2018 and 12/31/2018.

Process Information:

Process Description: MFN B8

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1732	MAX13085EESA+	135°C	1000 HRS	48	0	JADE2A306AX
HIGH TEMP OP LIFE	1732	MAX13085EESA+	135°C	1000 HRS	32	0	JADE2A306AX
HIGH TEMP OP LIFE	1738	MAX6414UK31/V+	135°C	1000 HRS	80	0	J8K2EA124KD
HIGH TEMP OP LIFE	1738	MAX6414UK31/V+	135°C	1000 HRS	80	0	J8K2EA124KE
HIGH TEMP OP LIFE	1744	MAX9938FELT+	135°C	500 HRS	80	0	JMKYCA233FA
HIGH TEMP OP LIFE	1746	MAX13089EESD+	135°C	1000 HRS	80	0	JAP9E3633DX
HIGH TEMP OP LIFE	1804	MAX5961ETM+	135°C	1000 HRS	48	0	JADL9A181AA
HIGH TEMP OP LIFE	1804	MAX5961ETM+	125°C	1000 HRS	32	0	JADL9A181AA
HIGH TEMP OP LIFE	1811	MAX6895AAZT/V+T	125°C	1000 HRS	80	0	JIAABA137JF
HIGH TEMP OP LIFE	1811	MAX6895AAZT/V+T	125°C	1000 HRS	80	0	JIAABA137JG
HIGH TEMP OP LIFE	1811	MAX6895AAZT/V+T	125°C	1000 HRS	80	0	JIAABA137JG
HIGH TEMP OP LIFE	1816	MAX16826ATJ+	125°C	1000 HRS	80	0	JFYF3243FX
HIGH TEMP OP LIFE	1837	MAX9025EWT+TG7	125°C	500 HRS	80	0	JOY0CA158A#
HIGH TEMP OP LIFE	1837	MAX9025EWT+TG7	125°C	1000 HRS	80	0	JOY0DA097C#
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1738	MAX6414UK31/V+	150°C	1000 HRS	80	0	J8K2EA124KD
STORAGE LIFE	1738	MAX6414UK31/V+	150°C	1000 HRS	78	0	J8K2EA124KE

STORAGE LIFE	1744	MAX3295AUT+T	150°C	1000	HRS	90	0	JDJ2D3135CD
STORAGE LIFE	1752	MAX9634HEWS+TG7	150°C	1000	HRS	80	0	JMKXCA255CJ
STORAGE LIFE	1804	MAX5961ETM+	150°C	500	HRS	80	0	JADL9A181AA
STORAGE LIFE	1811	MAX6895AAZT/V+T	150°C	1000	HRS	79	0	JIAABA137JF
STORAGE LIFE	1811	MAX6895AAZT/V+T	150°C	1000	HRS	79	0	JIAABA137JG
STORAGE LIFE	1811	MAX6895AAZT/V+T	150°C	1000	HRS	78	0	JIAABA137JG
STORAGE LIFE	1816	MAX16826ATJ+	150°C	500	HRS	80	0	JFYF3243FX
Total:							0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
TEMP CYCLE, 15' RAMP, 15' DWELL	1613	MAX77843E WV+	-40C TO +125C (Condition G)	1000	CYS	82	0	VAUE2A402BN-QL
TEMP CYCLE, 15' RAMP, 15' DWELL	1613	MAX77843E WV+	-40C TO +125C (Condition G)	500	CYS	80	0	VAUE2A402BN-QL
TEMP CYCLE, 15' RAMP, 15' DWELL	1726	MAX9634HEWS+TG7	-40C TO +125C (Condition G)	1000	CYS	83	0	JMKXCA204DB-QL
TEMP CYCLE, 15' RAMP, 15' DWELL	1726	MAX9634HEWS+TG7	-40C TO +125C (Condition G)	1000	CYS	83	0	JMKXCA204DB-CL
TEMP CYCLE, 5' RAMP, 10' DWELL	1738	MAX6414UK31/V+	-65C TO +150C (Condition C)	1000	CYS	80	0	J8K2EA124KD
TEMP CYCLE, 5' RAMP, 10' DWELL	1738	MAX6414UK31/V+	-65C TO +150C (Condition C)	1000	CYS	80	0	J8K2EA124KE
TEMP CYCLE, 5' RAMP, 10' DWELL	1743	MAX6750KA30/V+	-65C TO +150C (Condition C)	1000	CYS	80	0	JLZ4DA525D
TEMP CYCLE, 5' RAMP, 10' DWELL	1743	MAX6750KA30/V+	-65C TO +150C (Condition C)	1000	CYS	79	0	JLZ4DA525D
TEMP CYCLE, 5' RAMP, 10' DWELL	1744	MAX3295AUT+T	-65C TO +150C (Condition C)	1000	CYS	80	0	JDJ2D3135CD
TEMP CYCLE, 5' RAMP, 10' DWELL	1746	MAX13089EESD+	-65C TO +150C (Condition C)	1000	CYS	80	0	JAP9E3633DX
TEMP CYCLE, 5' RAMP, 10' DWELL	1752	MAX9634HEWS+TG7	-40C TO +125C (Condition G)	1000	CYS	80	0	JMKXCA255CJ
TEMP CYCLE, 5' RAMP, 10' DWELL	1752	MAX9634HEWS+TG7	-40C TO +125C (Condition G)	1000	CYS	80	0	JMKXCA255CJ
TEMP CYCLE, 15' RAMP, 15' DWELL	1804	MAX9634FEWS+TG7	-40C TO +125C (Condition G)	1000	CYS	80	0	JMKYCA254BD

TEMP CYCLE, 5' RAMP, 10' DWELL	1804	MAX5961ETM+	-65C TO +150C (Condition C)	1000	CYS	80	0	JADL9A181AA
TEMP CYCLE, 5' RAMP, 10' DWELL	1807	MAX6747KA30/V+T	-65C TO +150C (Condition C)	1000	CYS	79	0	JLZ1DA400IA
TEMP CYCLE, 5' RAMP, 10' DWELL	1808	MAX6747KA30/V+T	-65C TO +150C (Condition C)	1000	CYS	79	0	JLZ1DA400IB
TEMP CYCLE, 5' RAMP, 10' DWELL	1808	MAX6747KA30/V+T	-65C TO +150C (Condition C)	1000	CYS	79	0	JLZ1DA400IC
TEMP CYCLE, 5' RAMP, 10' DWELL	1810	MAX8538EEI+	-65C TO +150C (Condition C)	1000	CYS	80	0	JGN1F3195BA
TEMP CYCLE, 5' RAMP, 10' DWELL	1811	MAX6895AAZT/V+T	-65C TO +150C (Condition C)	1000	CYS	77	0	JIAABA137JF
TEMP CYCLE, 5' RAMP, 10' DWELL	1811	MAX6895AAZT/V+T	-65C TO +150C (Condition C)	1000	CYS	79	0	JIAABA137JG
TEMP CYCLE, 5' RAMP, 10' DWELL	1811	MAX6895AAZT/V+T	-65C TO +150C (Condition C)	1000	CYS	80	0	JIAABA137JG
TEMP CYCLE, 5' RAMP, 10' DWELL	1816	MAX16826ATJ+	-65C TO +150C (Condition C)	1000	CYS	80	0	JFYYF3243FX
Total:							0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE	TEST CODE VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
BIASED MOISTURE	1738	MAX6414UK31/V+	130C, 85% R.H.	96	HRS	79	0	J8K2EA124KD
BIASED MOISTURE	1738	MAX6414UK31/V+	130C, 85% R.H.	96	HRS	79	0	J8K2EA124KE
BIASED MOISTURE	1743	MAX6750KA30/V+	85 C/85% R.H.	96	HRS	80	0	JLZ4DA525D
BIASED MOISTURE	1743	MAX6750KA30/V+	85 C/85% R.H.	96	HRS	80	0	JLZ4DA525D
BIASED MOISTURE	1744	MAX3295AUT+T	85 C/85% R.H.	96	HRS	80	0	JDJ2D3135CD
BIASED MOISTURE	1746	MAX13089EESD+	85 C/85% R.H.	96	HRS	80	0	JAP9E3633DX
BIASED MOISTURE	1752	MAX9634HEWS+TG7	130C, 85% R.H.	264	HRS	80	0	JMKXCA255CJ
BIASED MOISTURE	1752	MAX9634HEWS+TG7	130C, 85% R.H.	96	HRS	80	0	JMKXCA255CJ
BIASED MOISTURE	1804	MAX9634FEWS+TG7	110C, 85% R.H.	264	HRS	80	0	JMKYCA254BD
BIASED MOISTURE	1804	MAX5961ETM+	130C, 85% R.H.	96	HRS	80	0	JADL9A181AA
BIASED MOISTURE	1811	MAX6895AAZT/V+T	130C, 85% R.H.	96	HRS	80	0	JIAABA137JF
BIASED MOISTURE	1811	MAX6895AAZT/V+T	130C, 85% R.H.	96	HRS	80	0	JIAABA137JG
BIASED MOISTURE	1811	MAX6895AAZT/V+T	130C, 85% R.H.	96	HRS	79	0	JIAABA137JG
BIASED MOISTURE	1816	MAX16826ATJ+	130C, 85% R.H.		HRS	80	0	JFYYF3243FX
Total:							0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
MOISTURE SOAK	1613	MAX77843EWW+	130C, 85% R.H.	264 HRS	80	0	VAUE2A402BN-QL
MOISTURE SOAK	1613	MAX77843EWW+	130C, 85% R.H.	264 HRS	80	0	VAUE2A402BN-QL
MOISTURE SOAK	1613	MAX77843EWW+	130C, 85% R.H.	264 HRS	80	0	VAUE2A402BN-CL
MOISTURE SOAK	1738	MAX6414UK31/V+	130C, 85% R.H.	96 HRS	80	0	J8K2EA124KD
MOISTURE SOAK	1738	MAX6414UK31/V+	130C, 85% R.H.	96 HRS	80	0	J8K2EA124KE
MOISTURE SOAK	1743	MAX6750KA30/V+	130C, 85% R.H.	96 HRS	80	0	JLZ4DA525D
MOISTURE SOAK	1743	MAX6750KA30/V+	130C, 85% R.H.	96 HRS	80	0	JLZ4DA525D
MOISTURE SOAK	1744	MAX3295AUT+T	130C, 85% R.H.	96 HRS	80	0	JDJ2D3135CD
MOISTURE SOAK	1804	MAX9634FEWS+TG7	130C, 85% R.H.	HRS	79	0	JMKYCA254BD
MOISTURE SOAK	1807	MAX6747KA30/V+T	130C, 85% R.H.	HRS	80	0	JLZ1DA400IA
MOISTURE SOAK	1808	MAX6747KA30/V+T	130C, 85% R.H.	HRS	79	0	JLZ1DA400IB
MOISTURE SOAK	1808	MAX6747KA30/V+T	130C, 85% R.H.	HRS	80	0	JLZ1DA400IC
MOISTURE SOAK	1811	MAX6895AAZT/V+T	130C, 85% R.H.	96 HRS	80	0	JIAABA137JF
MOISTURE SOAK	1811	MAX6895AAZT/V+T	130C, 85% R.H.	96 HRS	80	0	JIAABA137JG

Total: **0**

FAILURE RATE: **MTTF (YRS): 170528** **QUANTITY: 960** **FAILS: 0** **FITS: 0.7**