

10/27/2017



**RELIABILITY MONITOR REPORT
FOR**

Fab 101 S18

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:

MAX77818EWZ	MAX77865FSE	MAX77865SEW	MAX77865SEW	MAX86915EFD+
MAX98706AEW	MAX98706AEW	MAX98730EWJ+	MAX98730EWJ+	MAX98925EWV

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 38558 QUANTITY: 286 FAILS: 0 FITS: 3.0

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 7/1/2017 and 9/30/2017 .

Process Information:

Process Description: Fab 101 S18

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE		MAX77865FSEWZ+T	135°C	500 HRS	48	0	VBNF1Q001CH
HIGH TEMP OP LIFE	1626	MAX98706AEWV+TCLE	135°C	1000 HRS	80	0	VBFO6A006A
HIGH TEMP OP LIFE	1633	MAX98925EWV+T	135°C	1000 HRS	80	0	VATF8A754AG
HIGH TEMP OP LIFE	1640	MAX77865FSEWZ+T	135°C	192 HRS	32	0	VBNF1Q001C#
HIGH TEMP OP LIFE	1646	MAX98706AEWV+TCLE	135°C	1000 HRS	46	0	VBFO6A019AB
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1448	MAX77818EWZ+TG7	150°C	1000 HRS	50	0	VAQQ5A021A#
STORAGE LIFE	1448	MAX77818EWZ+TG7	150°C	1000 HRS	50	0	VAQQ5A022A#
STORAGE LIFE	1626	MAX98706AEWV+TCLE	150°C	1000 HRS	80	0	VBFO6A006A
STORAGE LIFE	1633	MAX98925EWV+T	150°C	1000 HRS	80	0	VATF8A754AG
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 15' RAMP, 15' DWELL		MAX98706AEWV+TCLE	-40C TO +125C (Condition G)	100 CYS	80	0	VBFO6A004A
TEMP CYCLE, 15' RAMP, 15' DWELL		MAX98706AEWV+TCLE	-40C TO +125C (Condition G)	100 CYS	80	0	VBFO6A030AW

TEMP CYCLE, 15' RAMP, 15' DWELL	1438	MAX98730EWJ+CGT	-40C TO +125C (Condntion G)	100	CYS	80	0	VASU5A004BI
TEMP CYCLE, 15' RAMP, 15' DWELL	1525	MAX98730EWJ+CGT	-40C TO +125C (Condntion G)	100	CYS	80	0	VASU5A007BC
TEMP CYCLE, 15' RAMP, 15' DWELL	1530	MAX98730EWJ+TCGT	-40C TO +125C (Condntion G)	100	CYS	80	0	VASU5A011AE
TEMP CYCLE, 15' RAMP, 15' DWELL	1530	MAX98730EWJ+TCGT	-40C TO +125C (Condntion G)	100	CYS	80	0	VASU5A010AH
TEMP CYCLE, 15' RAMP, 15' DWELL	1626	MAX98706AEWV+TCLE	-40C TO +125C (Condntion G)	850	CYS	80	0	VBFO6A006A#
TEMP CYCLE, 15' RAMP, 15' DWELL	1627	MAX98706AEWV+TCLE	-40C TO +125C (Condntion G)	850	CYS	80	0	VBFO6A006B#
TEMP CYCLE, 15' RAMP, 15' DWELL	1627	MAX98706AEWV+TCLE	-40C TO +125C (Condntion G)	850	CYS	80	0	VBFO6A006C#
TEMP CYCLE, 15' RAMP, 15' DWELL	1627	MAX98706AEWV+CLE	-40C TO +125C (Condntion G)	100	CYS	80	0	VBFO6A006BB
TEMP CYCLE, 15' RAMP, 15' DWELL	1633	MAX98925EWV+T	-40C TO +125C (Condntion G)	500	CYS	80	0	VATF8A754AG
TEMP CYCLE, 15' RAMP, 15' DWELL	1636	MAX98706AEWV+TCLE	-40C TO +125C (Condntion G)	100	CYS	80	0	VBFO6A004AC
TEMP CYCLE, 15' RAMP, 15' DWELL	1643	MAX98706AEWV+TCLE	-40C TO +125C (Condntion G)	100	CYS	80	0	VBFO6A017AF
TEMP CYCLE, 15' RAMP, 15' DWELL	1645	MAX98706AEWV+TCLE	-40C TO +125C (Condntion G)	100	CYS	40	0	VBFOA019AB
TEMP CYCLE, 15' RAMP, 15' DWELL	1649	MAX98706AEWV+TCLE	-40C TO +125C (Condntion G)	100	CYS	80	0	VBFO6A025A
TEMP CYCLE, 15' RAMP, 15' DWELL	1702	MAX98706AEWV+TCLE	-40C TO +125C (Condntion G)	500	CYS	80	0	VBFO6A030AW
TEMP CYCLE, 15' RAMP, 15' DWELL	1702	MAX77865SEWZ+T	-40C TO +125C (Condntion G)	500	CYS	80	0	VBNF1A010A
TEMP CYCLE, 15' RAMP, 15' DWELL	1702	MAX77865SEWZ+T	-40C TO +125C (Condntion G)	1000	CYS	79	0	VBNF1A010A
TEMP CYCLE, 15' RAMP, 15' DWELL	1702	MAX77865SEWZ+T	-40C TO +125C (Condntion G)	250	CYS	80	0	VBNP1A011A#
TEMP CYCLE, 15' RAMP, 15' DWELL	1703	MAX98706AEWV+TCLE	-40C TO +125C (Condntion G)	500	CYS	80	0	VBFO6A035AN
TEMP CYCLE, 15' RAMP, 15' DWELL	1703	MAX98706AEWV+TCLE	-40C TO +125C (Condntion G)	500	CYS	80	0	VBFO6A037AN

TEMP CYCLE, 15' RAMP, 15' DWELL	1703	MAX77865SEWZ+	-40C TO +125C (Condition G)	250	CYS	77	0	VBNF1A116AI
TEMP CYCLE, 15' RAMP, 15' DWELL	1703	MAX77865SEWZ+	-40C TO +125C (Condition G)	500	CYS	77	0	VBNF1A116AI
TEMP CYCLE, 15' RAMP, 15' DWELL	1704	MAX98706AEWV+TCLE	-40C TO +125C (Condition G)	100	CYS	80	0	VBFO6A033AN
TEMP CYCLE, 15' RAMP, 15' DWELL	1706	MAX98730EWJ+TCGT	-40C TO +125C (Condition G)	100	CYS	80	0	VASU5A013AE
TEMP CYCLE, 15' RAMP, 15' DWELL	1706	MAX98730EWJ+TCGT	-40C TO +125C (Condition G)	100	CYS	80	0	VASU5A008AE
TEMP CYCLE, 15' RAMP, 15' DWELL	1706	MAX98730EWJ+TCGT	-40C TO +125C (Condition G)	100	CYS	80	0	VASU5A013AG
TEMP CYCLE, 15' RAMP, 15' DWELL	1709	MAX98706AEWV+TCLE	-40C TO +125C (Condition G)	100	CYS	80	0	VBFO6A031AA
TEMP CYCLE, 15' RAMP, 15' DWELL	1712	MAX98706AEWV+TCLE	-40C TO +125C (Condition G)	100	CYS	80	0	VBFO6A032AD
TEMP CYCLE, 15' RAMP, 15' DWELL	1712	MAX98706AEWV+TCLE	-40C TO +125C (Condition G)	100	CYS	80	0	VBFO6A034AG
Total:							0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
BIASED MOISTURE		MAX86915EFD+	130C, 85%	96 HRS	50	0	VBTH1Q001Q1
BIASED MOISTURE	1438	MAX98730EWJ+TCGT	130C, 85%	264 HRS	80	0	VASU5A004B#
BIASED MOISTURE	1626	MAX98706AEWV+TCLE	130C, 85%	100 HRS	80	0	VBFO6A006A#
BIASED MOISTURE	1627	MAX98706AEWV+TCLE	130C, 85%	100 HRS	80	0	VBFO6A006B#
BIASED MOISTURE	1627	MAX98706AEWV+TCLE	130C, 85%	100 HRS	80	0	VBFO6A006C#
BIASED MOISTURE	1633	MAX98925EWV+T	130C, 85%	264 HRS	50	0	VATF8A754AG
BIASED MOISTURE	1703	MAX77865SEWZ+	130C, 85%	264 HRS	40	0	VBNF1A116AI
Total:							0

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
MOISTURE SOAK		MAX86915EFD+	130C, 85%	96 HRS	80	0	VBTH1Q001Q1
MOISTURE SOAK	1530	MAX98730EWJ+TCGT	130C, 85%	96 HRS	80	0	VASU5A011AE
MOISTURE SOAK	1530	MAX98730EWJ+TCGT	130C, 85%	96 HRS	80	0	VASU5A017AE
MOISTURE SOAK	1530	MAX98730EWJ+TCGT	130C, 85%	96 HRS	80	0	VASU5A010AH
MOISTURE SOAK	1626	MAX98706AEWV+TCLE	130C, 85%	100 HRS	80	0	VBFO6A006A#
MOISTURE SOAK	1627	MAX98706AEWV+TCLE	130C, 85%	100 HRS	80	0	VBFO6A006B#

MOISTURE SOAK	1627	MAX98706AEWV+TCLE	130C, 85%	100	HRS	80	0	VBFO6A006C#
MOISTURE SOAK	1706	MAX98730EWJ+TCGT	130C, 85%	96	HRS	80	0	VASU5A013AE
MOISTURE SOAK	1706	MAX98730EWJ+TCGT	130C, 85%	96	HRS	80	0	VASU5A008AE
MOISTURE SOAK	1706	MAX98730EWJ+TCGT	130C, 85%	96	HRS	80	0	VASU5A013AG

Total: 0

FAILURE RATE: **MTTF (YRS): 38558** **QUANTITY: 286** **FAILS: 0** **FITS: 3.0**