

6/25/2020



**RELIABILITY MONITOR REPORT
FOR**

TJT S4

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:

MAX16833FAUE	MAX16930BATL	MAX16984RATI/	MAX17823BGC	MAX4906FELB+
MAX6070AAUT	MAX6070BA12/	MAX6070BAUT	MAX8902BATA/	MAX9879ERV+

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 117211 QUANTITY: 709 FAILS: 0 FITS: 1.0

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 1/1/2020 and 3/31/2020 .

Process Information:

Process Description: TJT S4

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1701	MAX4906FELB+	125°C	192 HRS	80	0	TQKACA017P#
HIGH TEMP OP LIFE	1701	MAX4906FELB+	125°C	1000 HRS	79	0	TQKACA017P#
HIGH TEMP OP LIFE	1821	MAX16984RATI/V+	125°C	1000 HRS	80	0	TAKS1A477CC
HIGH TEMP OP LIFE	1835	MAX16984RATI/V+	125°C	1000 HRS	79	0	TAKS1Z502A
HIGH TEMP OP LIFE	1835	MAX16984RATI/V+	125°C	500 HRS	79	0	TAKS1Z502A
HIGH TEMP OP LIFE	1908	MAX16984RATI/V+	125°C	1000 HRS	72	0	TAKS1A569C
HIGH TEMP OP LIFE	1914	MAX16930BATLS/V+	125°C	1000 HRS	80	0	TBGY6A369CX
HIGH TEMP OP LIFE	1919	MAX6070BA12/V+TCSL	125°C	1000 HRS	80	0	TO0ZBA079HB
HIGH TEMP OP LIFE	1923	MAX8902BATA/V+T	125°C	1000 HRS	80	0	THTYCA432EA
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE		MAX6070BAUT12/V+T	150°C	1000 HRS	80	0	TO0ZBA076GA
STORAGE LIFE	1821	MAX16984RATI/V+	150°C	1000 HRS	80	0	TAKS1A477CC
STORAGE LIFE	1910	MAX17823BGCB/V+CV	150°C	1000 HRS	80	0	TASH6A833AA
STORAGE LIFE	1923	MAX8902BATA/V+T	150°C	1000 HRS	79	0	THTYCA432EA
STORAGE LIFE	1942	MAX16833FAUE/V+CLN	150°C	1000 HRS	80	0	TAXR3A7A2AX
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
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TEMP CYCLE, 5' RAMP, 10' DWELL		MAX4906FELB+	-65C TO +150C (Condition C)	500	CYS	80	0	TQKACA023AA
TEMP CYCLE, 5' RAMP, 10' DWELL		MAX4906FELB+	-65C TO +150C (Condition C)	500	CYS	80	0	TQKACA023C#
TEMP CYCLE, 5' RAMP, 10' DWELL		MAX6070BAUT12/V+T	-65C TO +150C (Condition C)	1000	CYS	80	0	TO0ZBA076GA
TEMP CYCLE, 15' RAMP, 15' DWELL		MAX9879ERV+	-40C TO +125C (Condition G)	500	CYS	77	0	TSJZCA159B
TEMP CYCLE, 5' RAMP, 10' DWELL	1701	MAX4906FELB+	-65C TO +150C (Condition C)	500	CYS	80	0	TQKACA017P#
TEMP CYCLE, 5' RAMP, 10' DWELL	1821	MAX16984RATI/V+	-65C TO +150C (Condition C)	1000	CYS	80	0	TAKS1A477CC
TEMP CYCLE, 5' RAMP, 10' DWELL	1908	MAX16984RATI/V+	-65C TO +150C (Condition C)	1000	CYS	80	0	TAKS1A569C
TEMP CYCLE, 5' RAMP, 10' DWELL	1910	MAX17823BGCB/V+CV	-65C TO +150C (Condition C)	1000	CYS	80	0	TASH6A833AA
TEMP CYCLE, 5' RAMP, 10' DWELL	1942	MAX16833FAUE/V+CLN	-65C TO +150C (Condition C)	1000	CYS	80	0	TAXR3A7A2AX
Total:							0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE	TEST CODE VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
BIASED MOISTURE	1701	MAX4906FELB+	130C, 85% R.H.	96 HRS	47	0	TQKACA017P#
BIASED MOISTURE	1701	MAX4906FELB+	130C, 85% R.H.	96 HRS	31	0	TQKACA017P#
BIASED MOISTURE	1827	MAX4906FELB+	130C, 85% R.H.	96 HRS	16	0	TQKACA023AA
BIASED MOISTURE	1827	MAX4906FELB+	130C, 85% R.H.	96 HRS	48	0	TQKACA023AA
BIASED MOISTURE	1827	MAX4906FELB+	130C, 85% R.H.	96 HRS	16	0	TQKACA023AA
BIASED MOISTURE	1827	MAX4906FELB+	130C, 85% R.H.	96 HRS	32	0	TQKACA023C#
BIASED MOISTURE	1827	MAX4906FELB+	130C, 85% R.H.	96 HRS	48	0	TQKACA023C#
BIASED MOISTURE	1836	MAX6070AAUT33/V+T	130C, 85% R.H.	96 HRS	79	0	TO0UBA057GG
BIASED MOISTURE	1908	MAX16984RATI/V+	130C, 85% R.H.	96 HRS	52	0	TAKS1A569C
BIASED MOISTURE	1908	MAX16984RATI/V+	130C, 85% R.H.	96 HRS	24	0	TAKS1A569C
BIASED MOISTURE	1910	MAX17823BGCB/V+CV	130C, 85% R.H.	96 HRS	40	0	TASH6A833AA
BIASED MOISTURE	1910	MAX17823BGCB/V+CV	130C, 85% R.H.	96 HRS	40	0	TASH6A833AA
BIASED MOISTURE	1919	MAX6070BA12/V+TCSL	130C, 85% R.H.	96 HRS	80	0	TO0ZBA079HA
BIASED MOISTURE	1919	MAX6070BA12/V+TCSL	130C, 85% R.H.	96 HRS	79	0	TO0ZBA079HB
BIASED MOISTURE	1942	MAX16833FAUE/V+CLN	130C, 85% R.H.	96 HRS	11	0	TAXR3A7A2AX
Total:							0

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE	TEST	CONDITION	READPOINT	QUANTITY	FAILS	LOT
	CODE	VEHICLE					NO.
MOISTURE SOAK		MAX9879ERV+	130C, 85% R.H. 96	HRS	77	0	TSJZCA159B
MOISTURE SOAK	1821	MAX16984RATI/V+	130C, 85% R.H. 96	HRS	80	0	TAKS1A477CC
MOISTURE SOAK	1836	MAX6070AAUT33/V+T	130C, 85% R.H. 96	HRS	80	0	TO0UBA057GG
MOISTURE SOAK	1919	MAX6070BA12/V+TCSL	130C, 85% R.H. 96	HRS	80	0	TO0ZBA079HA
MOISTURE SOAK	1919	MAX6070BA12/V+TCSL	130C, 85% R.H. 96	HRS	80	0	TO0ZBA079HB
MOISTURE SOAK	1950	MAX9879ERV+	130C, 85% R.H. 96	HRS	77	0	TSJZCA159A
MOISTURE SOAK	1952	MAX9879ERV+	130C, 85% R.H. 96	HRS	77	0	TSJZCA159C
				Total:		0	

FAILURE RATE: MTTF (YRS): 117211 QUANTITY: 709 FAILS: 0 FITS: 1.0