

7/10/2017



**RELIABILITY MONITOR REPORT  
FOR**

**MFN BCD88**

**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:

MAX15005BAU	MAX15006AAT	MAX5090CATE	MAX6767TALD	MAX6769TALD
MAX6769TALD	MAX6921AWI/V	MAX6921AWI+	MAX9921AUB/	

The calculated failure rate for devices using this process is:

**FAILURE RATE: MTTF (YRS): 179214 QUANTITY: 1061 FAILS: 0 FITS: 0.6**

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 4/1/2017 and 6/30/2017 .

**Process Information:**

Process Description: MFN BCD88

**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1527	MAX6769TALD2/VY+	135°C	1000 HRS	40	0	J984DA084MX
HIGH TEMP OP LIFE	1535	MAX6769TALD2/VY+T	135°C	1000 HRS	77	0	J984DA084L
HIGH TEMP OP LIFE	1606	MAX6767TALD2/V+	135°C	1000 HRS	79	0	J982DA094GB
HIGH TEMP OP LIFE	1613	MAX9921AUB/V+	135°C	1000 HRS	80	0	JFFZC3014Q1
HIGH TEMP OP LIFE	1613	MAX9921AUB/V+	135°C	1000 HRS	80	0	JFFZC3014Q2
HIGH TEMP OP LIFE	1613	MAX9921AUB/V+	135°C	1000 HRS	79	0	JFFZC3014Q3
HIGH TEMP OP LIFE	1618	MAX9921AUB/V+	135°C	1000 HRS	80	0	JFFZCA016AA
HIGH TEMP OP LIFE	1618	MAX9921AUB/V+	135°C	1000 HRS	80	0	JFFZCA016CA
HIGH TEMP OP LIFE	1618	MAX9921AUB/V+	135°C	1000 HRS	80	0	JFFZCA016DA
HIGH TEMP OP LIFE	1629	MAX15005BAUE/V+	135°C	1000 HRS	48	0	J831CA294BA
HIGH TEMP OP LIFE	1629	MAX15005BAUE/V+	135°C	1000 HRS	33	0	J831CA294BA
HIGH TEMP OP LIFE	1644	MAX15006AATT+	135°C	1000 HRS	47	0	JADZBA518AC
HIGH TEMP OP LIFE	1644	MAX15006AATT+	135°C	1000 HRS	33	0	JADZBA518AC
HIGH TEMP OP LIFE	1703	MAX15006AATT+	135°C	1000 HRS	47	0	JADZBA542CG
HIGH TEMP OP LIFE	1711	MAX5090CATE+	135°C	500 HRS	89	0	JZ6DBA069G
HIGH TEMP OP LIFE	1711	MAX5090CATE+	135°C	500 HRS	89	0	JZ6DBA069H
<b>Total:</b>						<b>0</b>	

**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1603	MAX6921AWI/V+	150°C	1000 HRS	60	0	JJU0CA020Q1

STORAGE LIFE	1613	MAX9921AUB/V+	150°C	1000	HRS	90	0	JFFZC3014Q1
STORAGE LIFE	1613	MAX9921AUB/V+	150°C	1000	HRS	88	0	JFFZC3014Q2
STORAGE LIFE	1613	MAX9921AUB/V+	150°C	1000	HRS	90	0	JFFZC3014Q3
STORAGE LIFE	1614	MAX6921AWI+	150°C	1000	HRS	80	0	JJU0CA022A
STORAGE LIFE	1618	MAX9921AUB/V+	150°C	500	HRS	80	0	JFFZCA016AA
STORAGE LIFE	1618	MAX9921AUB/V+	150°C	1000	HRS	80	0	JFFZCA016CA
STORAGE LIFE	1618	MAX9921AUB/V+	150°C	1000	HRS	80	0	JFFZCA016DA
STORAGE LIFE	1629	MAX15005BAUE/V+	150°C	1000	HRS	80	0	J831CA294BA
STORAGE LIFE	1644	MAX15006AATT+	150°C	1000	HRS	80	0	JADZBA518AC
STORAGE LIFE	1703	MAX15006AATT+	150°C	1000	HRS	80	0	JADZBA542CG
STORAGE LIFE	1711	MAX5090CATE+	150°C	500	HRS	90	0	JZ6DBA069G
STORAGE LIFE	1711	MAX5090CATE+	150°C	500	HRS	90	0	JZ6DBA069H
STORAGE LIFE	1711	MAX5090CATE+	150°C	500	HRS	90	0	JZ6DBA069I
<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	1527	MAX6769TALD2/VY+	-65C TO +150C (Condition C)	1000	CYS	77	0	J984DA084MX
TEMP CYCLE, 5' RAMP, 10' DWELL	1603	MAX6921AWI/V+	-65C TO +150C (Condition C)	1000	CYS	80	0	JJU0CA020Q1
TEMP CYCLE, 5' RAMP, 10' DWELL	1614	MAX6921AWI+	-65C TO +150C (Condition C)	1000	CYS	80	0	JJU0CA022A
TEMP CYCLE, 5' RAMP, 10' DWELL	1618	MAX9921AUB/V+	-65C TO +150C (Condition C)	500	CYS	110	0	JFFZCA016AA
TEMP CYCLE, 5' RAMP, 10' DWELL	1618	MAX9921AUB/V+	-65C TO +150C (Condition C)	1000	CYS	110	0	JFFZCA016CA
TEMP CYCLE, 5' RAMP, 10' DWELL	1618	MAX9921AUB/V+	-65C TO +150C (Condition C)	1000	CYS	80	0	JFFZCA016DA
TEMP CYCLE, 5' RAMP, 10' DWELL	1629	MAX15005BAUE/V+	-65C TO +150C (Condition C)	1000	CYS	80	0	J831CA294BA
TEMP CYCLE, 5' RAMP, 10' DWELL	1644	MAX15006AATT+	-65C TO +150C (Condition C)	1000	CYS	80	0	JADZBA518AC
TEMP CYCLE, 5' RAMP, 10' DWELL	1703	MAX15006AATT+	-65C TO +150C (Condition C)	1000	CYS	80	0	JADZBA542CG
TEMP CYCLE, 5' RAMP, 10' DWELL	1711	MAX5090CATE+	-65C TO +150C (Condition C)	1000	CYS	80	0	JZ6DBA069G

TEMP CYCLE, 5' RAMP, 10' DWELL	1711	MAX5090CATE+	-65C TO +150C (Condition C)	1000	CYS	80	0	JZ6DBA069H
TEMP CYCLE, 5' RAMP, 10' DWELL	1711	MAX5090CATE+	-65C TO +150C (Condition C)	1000	CYS	80	0	JZ6DBA069I

**Total: 0**

**TEMPERATURE HUMIDITY BIAS**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
BIASED MOISTURE	1613	MAX9921AUB/V+	130C, 85%	96	HRS	80	0	JFFZC3014Q3
BIASED MOISTURE	1614	MAX6921AWI+	130C, 85%	100	HRS	80	0	JJU0CA022A
BIASED MOISTURE	1629	MAX15005BAUE/V+	130C, 85%	96	HRS	77	0	J831CA294BA
BIASED MOISTURE	1644	MAX15006AATT+	130C, 85%	96	HRS	80	0	JADZBA518AC
BIASED MOISTURE	1703	MAX15006AATT+	130C, 85%	96	HRS	80	0	JADZBA542CG

**Total: 0**

**UNBIASED MOISTURE RESISTANCE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
MOISTURE SOAK	1618	MAX9921AUB/V+	130C, 85%	96	HRS	80	0	JFFZCA016AA
MOISTURE SOAK	1618	MAX9921AUB/V+	130C, 85%	96	HRS	80	0	JFFZCA016CA
MOISTURE SOAK	1618	MAX9921AUB/V+	130C, 85%	96	HRS	80	0	JFFZCA016DA
MOISTURE SOAK	1711	MAX5090CATE+	130C, 85%	96	HRS	80	0	JZ6DBA069G
MOISTURE SOAK	1711	MAX5090CATE+	130C, 85%	96	HRS	80	0	JZ6DBA069H
MOISTURE SOAK	1711	MAX5090CATE+	130C, 85%	96	HRS	80	0	JZ6DBA069I

**Total: 0**

**FAILURE RATE: MTTF (YRS): 179214      QUANTITY: 1061      FAILS: 0      FITS: 0.6**