

4/23/2015



**RELIABILITY MONITOR REPORT
FOR**

HYBRID

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:

MAX11190ETE+	MAX1480AEPI+	MAX14934EAW	MAX17515ALI+	MAX2082CXD+
MAX2082ENGC	MAX5860FUXH	MAX5860PUXH	MAX5860PUXH	MAX5860UXH+
MAX5862BUXH				

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 118595 QUANTITY: 943 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 4/1/2014 and 3/31/2015 .

Process Information:

Process Description: HYBRID

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE		MAX1480AEPI+	135°C	500 HRS	198	0	8FDPBLIY
HIGH TEMP OP LIFE		MAX1480AEPI+	135°C	500 HRS	198	0	8FDPBKAY
HIGH TEMP OP LIFE		MAX1480AEPI+	135°C	500 HRS	200	0	8FDPBLUY
HIGH TEMP OP LIFE	1416	MAX2082CXD+	135°C	500 HRS	22	0	KAHZ1AC2B
HIGH TEMP OP LIFE	1420	MAX2082ENGCXD+	135°C	1000 HRS	22	0	KAHZ1AJQ1
HIGH TEMP OP LIFE	1420	MAX2082CXD+	135°C	500 HRS	22	0	KAHZ1AJQ1
HIGH TEMP OP LIFE	1420	MAX2082ENGCXD+	135°C	1000 HRS	22	0	KAHZ1AJQ2
HIGH TEMP OP LIFE	1420	MAX2082CXD+	135°C	500 HRS	20	0	KAHZ1AJQ2
HIGH TEMP OP LIFE	1420	MAX17515ALI+	135°C	1000 HRS	79	0	BAMA8ABQ1
HIGH TEMP OP LIFE	1420	MAX17515ALI+	135°C	1000 HRS	80	0	BAMA8ABQ2
HIGH TEMP OP LIFE	1420	MAX17515ALI+	135°C	1000 HRS	80	0	BAMA8ABQ3
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1420	MAX5860UXH+	150°C	500 HRS	77	0	KAEJ8AWX
STORAGE LIFE	1420	MAX17515ALI+	150°C	1000 HRS	80	0	BAMA8ABQ1
STORAGE LIFE	1420	MAX17515ALI+	150°C	1000 HRS	80	0	BAMA8ABQ2
STORAGE LIFE	1420	MAX17515ALI+	150°C	1000 HRS	80	0	BAMA8ABQ3
STORAGE LIFE	1430	MAX5860FUXH+	150°C	500 HRS	77	0	KAEJ8AYX
STORAGE LIFE	1430	MAX5860FUXH+	150°C	1000 HRS	77	0	KAEJ8AYX

STORAGE LIFE	1430	MAX5862BUXH+	150°C	1000 HRS	77	0	KAEJ8AY
					Total:	0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL		MAX1480AEPI+	-65C TO +150C (Condition C)	100	CYS	100	1 8FDPBLIY
TEMP CYCLE, 5' RAMP, 10' DWELL		MAX1480AEPI+	-65C TO +150C (Condition C)	100	CYS	100	0 8FDPBKAY
TEMP CYCLE, 5' RAMP, 10' DWELL		MAX1480AEPI+	-65C TO +150C (Condition C)	100	CYS	100	0 8FDPBLUY
TEMP CYCLE, 5' RAMP, 10' DWELL	1420	MAX5860PUXH+	-65C TO +150C (Condition C)	1000	CYS	77	0 KAEJ8AWX
TEMP CYCLE, 5' RAMP, 10' DWELL	1420	MAX17515ALI+	-65C TO +150C (Condition C)	1000	CYS	80	1 BAMA8ABQ1
TEMP CYCLE, 5' RAMP, 10' DWELL	1420	MAX17515ALI+	-65C TO +150C (Condition C)	1000	CYS	80	0 BAMA8ABQ1
TEMP CYCLE, 5' RAMP, 10' DWELL	1420	MAX17515ALI+	-65C TO +150C (Condition C)	1000	CYS	79	0 BAMA8ABQ2
TEMP CYCLE, 5' RAMP, 10' DWELL	1420	MAX17515ALI+	-65C TO +150C (Condition C)	1000	CYS	80	0 BAMA8ABQ2
TEMP CYCLE, 5' RAMP, 10' DWELL	1420	MAX17515ALI+	-65C TO +150C (Condition C)	1000	CYS	79	0 BAMA8ABQ3
TEMP CYCLE, 5' RAMP, 10' DWELL	1420	MAX17515ALI+	-65C TO +150C (Condition C)	1000	CYS	80	0 BAMA8ABQ3
TEMP CYCLE, 5' RAMP, 10' DWELL	1430	MAX5860FUXH+	-65C TO +150C (Condition C)	1000	CYS	77	0 KAEJ8AYX
TEMP CYCLE, 5' RAMP, 10' DWELL	1430	MAX5862BUXH+	-65C TO +150C (Condition C)	1000	CYS	77	0 KAEJ8AY
TEMP CYCLE, 5' RAMP, 10' DWELL	N/A	MAX14934EAW+	-65C TO +150C (Condition C)	1000	CYS	493	0 BAQU7AF#
					Total:	2	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
MOISTURE SOAK	1308	MAX11190ETE+	85 C/85% R.H.	500	HRS	47	0 BAGB8ADA
MOISTURE SOAK	1308	MAX11190ETE+	85 C/85% R.H.	1000	HRS	23	0 BAGB8ADB
MOISTURE SOAK	1308	MAX11190ETE+	85 C/85% R.H.	1000	HRS	24	0 BAGB8ADC
MOISTURE SOAK	1420	MAX5860PUXH+	85 C/85% R.H.	500	HRS	19	0 KAEJ8AWX

MOISTURE SOAK	1420	MAX5860PUXH	85 C/85% R.H.	1000	HRS	19	0	KAEJ8AWX
MOISTURE SOAK	1420	MAX17515ALI+	130C, 85% R.H.	1000	HRS	80	0	BAMA8ABQ1
MOISTURE SOAK	1420	MAX17515ALI+	130C, 85% R.H.	1000	HRS	80	0	BAMA8ABQ2
MOISTURE SOAK	1420	MAX17515ALI+	85 C/85% R.H.	1000	HRS	80	0	BAMA8ABQ3
MOISTURE SOAK	1430	MAX5860FUXH+	85 C/85% R.H.	500	HRS	18	0	KAEJ8AYX
MOISTURE SOAK	1430	MAX5860FUXH+	85 C/85% R.H.	1000	HRS	18	0	KAEJ8AYX
MOISTURE SOAK	1430	MAX5862BUXH+	85 C/85% R.H.	500	HRS	18	0	KAEJ8AY
MOISTURE SOAK	1430	MAX5862BUXH+	85 C/85% R.H.	1000	HRS	18	0	KAEJ8AY

Total: **0**

FAILURE RATE: **MTTF (YRS): 118595** **QUANTITY: 943** **FAILS: 0** **FITS: 1.0**