



10/8/2010

RELIABILITY MONITOR REPORT
FOR

uTDFN Package

MAXIM Integrated Products

120 San Gabriel Dr.
Sunnyvale, CA 94086

This Report was prepared by
Maxim Reliability Engineering

Summary:

The data in the tables that follow was generated as the result of an on-going Package Reliability Monitor. The specific assemblies included in this package monitor are:

ASSY SITE	PINS	PACKAGE	UTL (NSEB)	UTAC	12 uTDFN
Hana AYUTHAYA	6	uTDFN	UTL (NSEB)	UTAC	12 uTDFN

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 14921 FITS: 7.7

The parameters used to calculate this failure rate are as follows:

Cf: 60% Ea: 0.7 Tu: 25 °C

The reliability data follows. At the start of this data is a description of the assembly vehicle used to generate this reliability data. The next section is the detailed reliability data for each stress. The reliability data section includes the latest data available. This report covers data between 10/1/2009 and 9/30/2010.

Assembly Information:

Package Type: uTDFN
Date Code Range: 1007 to 1020

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	1018	MAX9635EDT+T	135C	500 HRS	80	0	
HIGH TEMP OP LIFE	1019	MAX9635EDT+T	135C	500 HRS	80	0	
HIGH TEMP OP LIFE	1020	MAX9635EDT+T	135C	1000 HRS	80	0	
Total:						0	

PACKAGE TESTS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
BOND STRENGTH	1018	MAX9635EDT+T	> 5 GMS	245 WIRES	20	0	
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	1018	MAX9635EDT+T	150C	1000 HRS	77	0	
STORAGE LIFE	1019	MAX9635EDT+	150C	1000 HRS	77	0	
STORAGE LIFE	1020	MAX9635EDT+T	150C	1000 HRS	75	0	
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE, 5' RAMP, 10' DWELL	1007	MAX17116EVC+T	-65C TO 150C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	1007	MAX17116EVC+T	-65C TO 150C	1000 CYS	77	0	
TEMP CYCLE, 5' RAMP, 10' DWELL	1007	MAX17116EVC+T	-65C TO 150C	1000 CYS	77	0	

TEMP CYCLE, 5' RAMP, 10' DWELL	1019	MAX9635EDT+T	-65C TO 150C	1000 CYS	77	0
TEMP CYCLE, 5' RAMP, 10' DWELL	1020	MAX9635EDT+T	-65C TO 150C	1000 CYS	77	0
Total:						0

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
MOISTURE SOAK	1007	MAX17116EVC+T	85 C/85% R.H.	500 HRS	45	0	
MOISTURE SOAK	1007	MAX17116EVC+T	85 C/85% R.H.	500 HRS	45	0	
MOISTURE SOAK	1007	MAX17116EVC+T	85 C/85% R.H.	1000 HRS	45	0	
MOISTURE SOAK	1020	MAX9635EDT+T	85 C/85% R.H.	1000 HRS	45	0	
Total:						0	

FAILURE RATE: MTTF (YRS): 14921 FITS: 7.7