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ISO/TS16949:2002  
FILE NO. A9273

Date: 20/08/2008

**Reliability Test Summary**

RTS No: 1163

**Device Family:** Bipolar EP3  
**Package:** EP3  
**Date From:** 11/06/2007  
**Date To:** 30/05/2008**Environmental Trial Data**

Trial Type	Specification	Lots	Devices Tested	Devices Failed	Cumulative Hours	% Failures
CS (Cold Store)	JESD22-A119	2	90	0	90720	0.000
HS (Hot Store)	JESD22-A103	6	507	0	511056	0.000
PCLV (Pre-conditioned Autoclave)	JESD22-A102	1	77	0	7392	0.000
PTHB (Pre-conditioned Temperature Humidity + Bias)	JESD22-A101	1	77	0	77616	0.000
RSHD (Resistance to Solder Heat Dip)	JESD22-B106	9	533	0	533	0.000
Solderability (Post Hot Store)	IEC68-2-20	1	45	0	45	0.000
TC (Temperature Cycle Air to Air)	JESD22-A104	13	937	0	874726	0.000

**Electrical Stress Trials****Electrical Trial Type:** **HTRB (High Temperature Reverse Bias - JESD22-A108)**  
**Service Temperature (Deg C):** 55  
**Ambient Temperature (Deg C):** 150  
**Activation Energy (eV):** 0.9  
**Confidence Level (%):** 60**Actual Device Hours:** 556416  
**Equivalent Device Hours:** 7.082E+08  
**Lots:** 7  
**Devices Tested:** 552  
**Devices Failed:** 0**Mean Time To Failure (Hours):** 7.729E+08  
**Failure Rate FITs:** 1.2938  
**Failure Rate %/1000 Hours:** 1.294E-04David Fitton  
Quality Engineer