7/20/2007

RELIABILITY MONITOR REPORT
FOR

0.6µm Process 6"

Dallas Semiconductor

4401 South Beltwood Parkway
Dallas, TX 75244-3292

This Report was prepared by
Dallas Semiconductor Reliability Engineering

Summary:

The data in the tables that follow was generated as the result of an on-going Process Reliability Monitor. The products covered by this process monitor are:

DS1002	DS1050	DS1052	DS1077	DS1077L
DS1085	DS1085L	DS1086	DS1086H	DS1086L
DS1087L	DS1094L	DS1099	DS1100	DS1100L
DS1102L	DS1110	DS1110L	DS1123L	DS1135
DS1135L	DS12885	DS12R885	DS12R885-5	DS1311
DS1318	DS1337	DS1337C	DS1338	DS1338-3
DS1338-33	DS1338C	DS1339	DS1339C	DS1339U-3
DS1339U-33	DS1340	DS1340C	DS1371	DS1374
DS1374-3	DS1374-33	DS1374C	DS1375	DS1390
DS1391	DS1392	DS1393	DS1482	DS1500
DS1501	DS1543	DS1553	DS1558	DS1615
DS1616	DS1620	DS1621	DS1626	DS1631
DS1631A	DS1643	DS1672	DS1678	DS1679
DS1682	DS1721	DS1722	DS1726	DS1731
DS1743	DS1748	DS1775	DS1805	DS1809
DS1820B	DS1822	DS1830	DS1831	DS1845
DS1846	DS1849	DS1851	DS1854	DS1855
DS1858	DS1870	DS1921	DS1921G	DS1921H
DS1921Z	DS1961	DS2030	DS2045	DS2117M
DS2118M	DS2119M	DS2120	DS2125	DS2127
DS2129	DS21349	DS21352	DS21354	DS21448
DS2148	DS2149	DS21552	DS21554	DS21600
DS21602	DS21604	DS21610	DS2196	DS2197
DS21Q352	DS21Q354	DS21Q43	DS21Q50	DS21Q552
DS21Q554	DS21Q58	DS21Q59	DS2401	DS2405
DS2408	DS2409	DS2411	DS2415	DS2417
DS2421	DS2422	DS2432	DS2433	DS2436
DS2438	DS2450	DS2470	DS2490	DS2501
DS2502	DS2503	DS2505	DS2702	DS2720
DS2740	DS2751	DS2760	DS2761	DS2762
DS2763	DS2770	DS2890	DS28E01	DS29020
DS3903	DS3904	DS3905	DS3930	DS4000
DS4301	DS4303	DS4510	DS5001	DS5002
DS5240	DS5250	DS7864B	DS7864D	DS80C310
DS80C320	DS80C323	DS80CH11	DS87C520	DS87C550
DSQ3301-K02				

The calculated failure rate for devices using this process is:

FAILURE RATE: **MTTF (YRS): 9048** **FITS: 12.6**

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

Cf: 60% **Ea: 0.7** **Tu: 25** °C

The reliability data follows. A the start of this data is the process information. 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 7/1/2006 and 6/30/2007 .

Device Information:

Process: 0.6µm Process 6"

Interconnect: Aluminum / 1% Silicon / 0.5% Copper
Gate Oxide Thickness: 150 Å

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT		QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0648	DS2433	125C, 6.0 VOLTS	1000	HRS	77	0	
					Total:		**0**	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT		QUANTITY	FAILS	FA NO
TEMP CYCLE	0648	DS2433	-55C TO 125C	1000	CYS	77	0	
					Total:		**0**	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT		QUANTITY	FAILS	FA NO
HAST	0648	DS2433	130C, 85%R.H.,5.5V	96	HRS	77	0	
					Total:		**0**	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT		QUANTITY	FAILS	FA NO
AUTOCLAVE	0648	DS2433	121C, 2 ATM STEAM, UNBIASED	168	HRS	77	0	
					Total:		**0**	

W/E ENDURANCE AND DATA RET'N

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT		QUANTITY	FAILS	FA NO
WRITE CYCLE STRESS (KCYS)	0648	DS2433	25 C, 5.0 VOLTS	50	KCYS	77	0	
STORAGE LIFE			150C	1000	HRS	77	7	
					Total:		**7**	

FAILURE RATE: **MTTF (YRS): 9048** **FITS: 12.6**