

# RELIABILITY MONITOR

## DS1100Z-25 JUL '03 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1100	A3	0323	DJ330003ACC	8	SOIC	150x1.4	NSEB
<b>PROCESS</b>		D6W-1P2M,HPVt,E2,TCZ PBL:GOI		Passivation w/Nov TEOS Oxide-Nitride			

Summary Data with Chi-Square Distribution Assumed.  
 Stress Ambient Temperature and Voltage to  
 Field Ambient Temperature And Voltage

Cf:   
 Ea:   
 β:

Tuse:  °C  
 Vuse:  Volts

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
31899	HIGH TEMP OP LIFE	125C, 5.5 VOLTS	80	500	HRS	0
		125C, 5.5 VOLTS	80	1000	HRS	0
		TOTAL:			FAIL RATE (Fits): 12	DEVICE HRS: 7.55E+07
31896	ULTRASOUND	J-STD-020	4	1	DYS	0
		TOTAL:				0
31897	STORAGE LIFE MOISTURE SOAK CONVECTION REFLOW	125C	241	24	HRS	
		85 C/85% R.H.	241	168	HRS	
		235C	241	3	PASS	0
		TOTAL:				0
31898	PRECONDITION U/S	J-STD-020	4	1	DYS	0
		TOTAL:				0
31900	TEMP CYCLE	-55C TO 125C	40	500	CYS	0
			40	1000	CYS	0
		TOTAL:				0
31901	BIASED MOISTURE	85/85, 5.5 VOLTS	77	500	HRS	0
			77	1000	HRS	0
		TOTAL:				0

PROJECT NO: 27782

# RELIABILITY MONITOR

## DS1100Z-25 JUL '03 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1100	A3	0323	DJ330003ACC	8	SOIC	150x1.4	NSEB
<b>PROCESS</b>		D6W-1P2M,HPVt,E2,TCZ PBL:GOI		Passivation w/Nov TEOS Oxide-Nitride			

Summary Data with Chi-Square Distribution Assumed.  
 Stress Ambient Temperature and Voltage to  
 Field Ambient Temperature And Voltage

Cf:	60%	Tuse:	25 °C
Ea:	0.7	Vuse:	5.5 Volts
β:	0		

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
31902	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	40	168	HRS	0
<b>TOTAL:</b>						<b>0</b>

PROJECT NO: 27782

# RELIABILITY MONITOR

## DS1232L JUL '03 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1232	C2-L	0327	DK343027AAB	8	SOIC	150x1.4	ATP (Amkor, PI)
<b>PROCESS</b> 1P, 1M, 0.8um, PdplDiode, Low Vts , Passivation w/Nov TEOS Oxide-Nitride							

Summary Data with Chi-Square Distribution Assumed.  
 Stress Ambient Temperature and Voltage to  
 Field Ambient Temperature And Voltage

Cf:   
 Ea:   
 β:

Tuse:   
 Vuse:

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
31906	HIGH TEMP OP LIFE	125C, 5.5 VOLTS	80	500	HRS	0
		125C, 5.5 VOLTS	80	1000	HRS	0
		TOTAL:			FAIL RATE (Fits): 12	DEVICE HRS: 7.55E+07
31903	ULTRASOUND	J-STD-020	4	1	DYS	0
		TOTAL:				0
31904	STORAGE LIFE MOISTURE SOAK CONVECTION REFLOW	125C	241	24	HRS	
		85 C/85% R.H.	241	168	HRS	
		235C	241	3	PASS	0
		TOTAL:				0
31905	PRECONDITION U/S	J-STD-020	4	7	DYS	0
		TOTAL:				0
31907	TEMP CYCLE	-55C TO 125C	40	500	CYS	0
			40	1000	CYS	0
		TOTAL:				0
31908	HAST	130C, 85%R.H.,5.5V	77	96	HRS	0
		TOTAL:				0
31909	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	40	168	HRS	0

PROJECT NO: 27781

# RELIABILITY MONITOR

## DS1267-010 OCT '03 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1267	A1-50	0340	DK230310ACA	20	TSSOP	4.4x0.9	ATP (Amkor, PI)
<b>PROCESS</b> 1P, 1M, 1.2um, II Poly1, TEOS Passivation w/Nov TEOS Oxide-Nitride							

Summary Data with Chi-Square Distribution Assumed.  
 Stress Ambient Temperature and Voltage to  
 Field Ambient Temperature And Voltage

Cf:   
 Ea:   
 β:

Tuse:  °C  
 Vuse:  Volts

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
32762	HIGH VOLTAGE LIFE	125C, 6.0 V, -4.0V	80	500	HRS	0
		125C, 6.0 V, -4.0V	80	1000	HRS	0
		TOTAL:		12	DEVICE HRS: 7.55E+07	
32759	ULTRASOUND	J-STD-020	4	5	DYS	0
		TOTAL:				0
32760	STORAGE LIFE MOISTURE SOAK CONVECTION REFLOW	125C	241	24	HRS	
		85 C/85% R.H.	241	168	HRS	
		235C	241	3	PASS	0
		TOTAL:				0
32761	PRECONDITION U/S	J-STD-020	4	2	DYS	0
		TOTAL:				0
32763	TEMP CYCLE	-55C TO 125C	40	500	CYS	0
			40	1000	CYS	0
		TOTAL:				0
32764	BIASED MOISTURE	85/85, 5.5 VOLTS	77	500	HRS	0
			77	1000	HRS	0
		TOTAL:				0

PROJECT NO: 29487

# RELIABILITY MONITOR

## DS1267-010 OCT '03 MONITOR

<b>DEVICE</b>	<b>REVISION</b>	<b>DATE CD</b>	<b>LOT NUMBER</b>	<b>PINS</b>	<b>PACKAGE</b>	<b>WIDTH</b>	<b>ASSEMBLY SITE</b>
DS1267	A1-50	0340	DK230310ACA	20	TSSOP	4.4x0.9	ATP (Amkor, PI)
<b>PROCESS</b> 1P, 1M, 1.2um, II Poly1 , TEOS Passivation w/Nov TEOS Oxide-Nitride							

Summary Data with Chi-Square Distribution Assumed.  
 Stress Ambient Temperature and Voltage to  
 Field Ambient Temperature And Voltage

Cf: <input style="width: 50px;" type="text" value="60%"/>	Tuse: <input style="width: 50px;" type="text" value="25 °C"/>
Ea: <input style="width: 50px;" type="text" value="0.7"/>	Vuse: <input style="width: 50px;" type="text" value="5.5 Volts"/>
β: <input style="width: 50px;" type="text" value="0"/>	

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
32765	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	40	168	HRS	0
<b>TOTAL:</b>						0

PROJECT NO: 29487

# RELIABILITY MONITOR

## DS1620 OCT '03 MONITOR

<b>DEVICE</b>	<b>REVISION</b>	<b>DATE CD</b>	<b>LOT NUMBER</b>	<b>PINS</b>	<b>PACKAGE</b>	<b>WIDTH</b>	<b>ASSEMBLY SITE</b>
DS1620	D1	0334	DU110113AAD	8	SOIC	208x1.9	Hana
<b>PROCESS</b>		D8W-1P1M,HPVt,E2		LOCOS:GOI	Passivation w/Nov TEOS Oxide-Nitride		

Summary Data with Chi-Square Distribution Assumed.  
 Stress Ambient Temperature and Voltage to  
 Field Ambient Temperature And Voltage

Cf:   
 Ea:   
 β:

Tuse:  °C  
 Vuse:  Volts

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
32504	HIGH TEMP OP LIFE	125C, 5.5 VOLTS	80	500	HRS	0
		125C, 5.5 VOLTS	80	1000	HRS	0
		TOTAL:				FAIL RATE (Fits): 12
32501	ULTRASOUND	J-STD-020	4	7	DYS	0
		TOTAL:				
32502	STORAGE LIFE MOISTURE SOAK CONVECTION REFLOW	125C	244	24	HRS	
		85 C/85% R.H.	244	168	HRS	
		235C	244	3	PASS	0
		TOTAL:				
32503	PRECONDITION U/S	J-STD-020	4	7	DYS	0
		TOTAL:				
32505	TEMP CYCLE	-55C TO 125C	40	500	CYS	0
			40	1000	CYS	0
		TOTAL:				
32506	BIASED MOISTURE	85/85, 5.5 VOLTS	70	500	HRS	0
			70	1000	HRS	0
		TOTAL:				

PROJECT NO: 28948

# RELIABILITY MONITOR

## DS1620 OCT '03 MONITOR

<b>DEVICE</b>	<b>REVISION</b>	<b>DATE CD</b>	<b>LOT NUMBER</b>	<b>PINS</b>	<b>PACKAGE</b>	<b>WIDTH</b>	<b>ASSEMBLY SITE</b>
DS1620	D1	0334	DU110113AAD	8	SOIC	208x1.9	Hana
<b>PROCESS</b>		D8W-1P1M,HPVt,E2 LOCOS:GOI		Passivation w/Nov TEOS Oxide-Nitride			

Summary Data with Chi-Square Distribution Assumed.  
 Stress Ambient Temperature and Voltage to  
 Field Ambient Temperature And Voltage

Cf:   
 Ea:   
 β:

Tuse:  °C  
 Vuse:  Volts

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
32507	WRITE CYCLE STRESS	85 C, 5.5 VOLTS	50	50	KCYS	0
		TOTAL:				0
32508	STORAGE LIFE	150C	50	500	HRS	0
			50	1000	HRS	0
		TOTAL:				0

PROJECT NO: 28948

# RELIABILITY MONITOR

## DS1803-010 OCT '02 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1803	A2-A	0234	DK236047AAB	16	SOIC	150x1.4	ATP (Amkor, PI)
<b>PROCESS</b> 1P, 2M, 0.8um, PdplDiode, WJ Passivation w/Nov TEOS Oxide-Nitride							

Summary Data with Chi-Square Distribution Assumed.  
 Stress Ambient Temperature and Voltage to  
 Field Ambient Temperature And Voltage

Cf:   
 Ea:   
 β:

Tuse:  °C  
 Vuse:  Volts

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
30229	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS	80	500	HRS	0
		125C, 7.0 VOLTS	80	1000	HRS	0
		TOTAL:			FAIL RATE (Fits): 12	DEVICE HRS: 7.55E+07
30226	ULTRASOUND	J-STD-020	4	2	DYS	0
		TOTAL:				0
30227	STORAGE LIFE MOISTURE SOAK CONVECTION REFLOW	125C	241	24	HRS	
		85 C/85% R.H.	241	168	HRS	
		235C	241	3	PASS	0
		TOTAL:				0
30228	PRECONDITION U/S	J-STD-020	4	2	DYS	0
		TOTAL:				0
30230	TEMP CYCLE	-55C TO 125C	40	500	CYS	0
			40	1000	CYS	0
		TOTAL:				0
30231	BIASED MOISTURE	85/85, 5.5 VOLTS	77	500	HRS	0
			77	1000	HRS	0
		TOTAL:				0

PROJECT NO: 24620

# RELIABILITY MONITOR

**DS1803-010 OCT '02 MONITOR**

<b>DEVICE</b>	<b>REVISION</b>	<b>DATE CD</b>	<b>LOT NUMBER</b>	<b>PINS</b>	<b>PACKAGE</b>	<b>WIDTH</b>	<b>ASSEMBLY SITE</b>
DS1803	A2-A	0234	DK236047AAB	16	SOIC	150x1.4	ATP (Amkor, PI)
<b>PROCESS</b> 1P, 2M, 0.8um, PdplDiode, WJ Passivation w/Nov TEOS Oxide-Nitride							

Summary Data with Chi-Square Distribution Assumed.	Cf: <input type="text" value="60%"/>	Tuse: <input type="text" value="25 °C"/>
Stress Ambient Temperature and Voltage to	Ea: <input type="text" value="0.7"/>	Vuse: <input type="text" value="5.5 Volts"/>
Field Ambient Temperature And Voltage	β: <input type="text" value="0"/>	

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
30232	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	40	168	HRS	0
<b>TOTAL:</b>						0

## RELIABILITY MONITOR

### DS2118M SEP '03 MONITOR

<b>DEVICE</b>	<b>REVISION</b>	<b>DATE CD</b>	<b>LOT NUMBER</b>	<b>PINS</b>	<b>PACKAGE</b>	<b>WIDTH</b>	<b>ASSEMBLY SITE</b>
DS2118M	C1-6"	0309	DN319658AAC	36	SSOP	7.5x2.4	ATK (Amkor, K)
<b>PROCESS</b> D6S-1P1M,HPVt,N+ESD,TCN3 ALOCO Laser/LTO Ox - Pass/Nit - Gen. LaserPrb							

Summary Data with Chi-Square Distribution Assumed.  
 Stress Ambient Temperature and Voltage to  
 Field Ambient Temperature And Voltage

Cf:   
 Ea:   
 β:

Tuse:  °C  
 Vuse:  Volts

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
32420	HIGH TEMP OP LIFE	125C, 5.5 VOLTS	79	500	HRS	0
		125C, 5.5 VOLTS	79	500	HRS	0
		125C, 5.5 VOLTS	79	1000	HRS	
		125C, 5.5 VOLTS	79	1000	HRS	
TOTAL:			FAIL RATE (Fits): 6	DEVICE HRS: 1.49E+08		0
32417	ULTRASOUND	J-STD-020	4	6	DYS	0
		TOTAL:				0
32419	PRECONDITION U/S	J-STD-020	4	6	DYS	0
		TOTAL:				0
32421	TEMP CYCLE	-55C TO 125C	77	500	CYS	0
			77	1000	CYS	0
		TOTAL:				0
32422	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	77	168	HRS	0
		TOTAL:				0

PROJECT NO: 28420

## RELIABILITY MONITOR

### DS2401 AUG '03 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2401	C2	0331	DU342603AB	3	TO92	150	Hana
<b>PROCESS</b> 1P, 1M, 0.6um, Pd, Ti/TiN M1 , WJ Laser/TEOS Ox - Pass/Nit - Gen.LaserPrb							

Summary Data with Chi-Square Distribution Assumed.  
 Stress Ambient Temperature and Voltage to  
 Field Ambient Temperature And Voltage

Cf:   
 Ea:   
 β:

Tuse:   
 Vuse:

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
32237	HIGH TEMP OP LIFE	125C, 6.0 VOLTS	80	500	HRS	0
		125C, 6.0 VOLTS	80	1000	HRS	0
		TOTAL:			FAIL RATE (Fits): 12	DEVICE HRS: 7.55E+07
32238	TEMP CYCLE	-55C TO 125C	45	500	CYS	0
			45	1000	CYS	0
		TOTAL:				
32239	HAST	130C, 85%R.H.,5.5V	77	96	HRS	0
		TOTAL:				
32240	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	45	168	HRS	0
		TOTAL:				

PROJECT NO: 28159

# RELIABILITY MONITOR

## DS2401 NOV '03 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2401	C2	0345	DU346103AF	3	TO92	150	Hana
<b>PROCESS</b> 1P, 1M, 0.6um, Pd, Ti/TiN M1 , WJ Laser/TEOS Ox - Pass/Nit - Gen.LaserPrb							

Summary Data with Chi-Square Distribution Assumed.  
 Stress Ambient Temperature and Voltage to  
 Field Ambient Temperature And Voltage

Cf:   
 Ea:   
 β:

Tuse:   
 Vuse:

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
32947	HIGH TEMP OP LIFE	125C, 6.0 VOLTS	80	500	HRS	0
		125C, 6.0 VOLTS	80	1000	HRS	0
		TOTAL:			FAIL RATE (Fits): 12	DEVICE HRS: 7.55E+07
32948	TEMP CYCLE	-55C TO 125C	45	500	CYS	0
			45	1000	CYS	0
		TOTAL:				
32949	HAST	130C, 85%R.H.,5.5V	77	96	HRS	0
		TOTAL:				
32950	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	45	168	HRS	0
		TOTAL:				

PROJECT NO: 29949

## RELIABILITY MONITOR

### DS2401 FEB '04 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2401	C2	0403	DU349304AC	3	TO92	150	Hana
<b>PROCESS</b> 1P, 1M, 0.6um, Pd, Ti/TiN M1 , WJ Laser/TEOS Ox - Pass/Nit - Gen.LaserPrb							

Summary Data with Chi-Square Distribution Assumed.

Cf:

Tuse:

Stress Ambient Temperature and Voltage to

Ea:

Vuse:

Field Ambient Temperature And Voltage

β:

**NO OF FAILS**

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
33396	HIGH TEMP OP LIFE	125C, 6.0 VOLTS	80	500	HRS	0
		125C, 6.0 VOLTS	80	1000	HRS	0
		TOTAL:	12	FAIL RATE (Fits):		DEVICE HRS: 7.55E+07
33397	TEMP CYCLE	-55C TO 125C	45	500	CYS	0
			45	1000	CYS	0
		TOTAL:				
33399	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	45	168	HRS	0
		TOTAL:				

PROJECT NO: 30834

## RELIABILITY MONITOR

### DS80C320 SEP '03 MONITOR

<b>DEVICE</b>	<b>REVISION</b>	<b>DATE CD</b>	<b>LOT NUMBER</b>	<b>PINS</b>	<b>PACKAGE</b>	<b>WIDTH</b>	<b>ASSEMBLY SITE</b>
DS80C320	C5	0323	DQ338181AAA	40	PDIP	600	ATEC
<b>PROCESS</b> D6RL-1P1M,SILP1,LLVt,N+ESD PBL:G Passivation w/Nov TEOS Oxide-Nitride							

Summary Data with Chi-Square Distribution Assumed.  
 Stress Ambient Temperature and Voltage to  
 Field Ambient Temperature And Voltage

Cf:   
 Ea:   
 β:

Tuse:   
 Vuse:

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
32413	HIGH TEMP OP LIFE	125C, 5.5 VOLTS	77	500	HRS	0
		125C, 5.5 VOLTS	77	1000	HRS	
		TOTAL:				FAIL RATE (Fits): 13
32414	TEMP CYCLE	-55C TO 125C	45	500	CYS	0
			45	1000	CYS	0
		TOTAL:				
32415	BIASED MOISTURE	85/85, 5.5 VOLTS	77	500	HRS	0
			77	1000	HRS	0
		TOTAL:				
32416	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	45	96	HRS	0
		TOTAL:				

PROJECT NO: 28609

## RELIABILITY MONITOR

### DS87C520 DEC '02 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS87C520	A15-I	0232	DK241602AAA	44	PLCC	650x65	ATP (Amkor, PI)
<b>PROCESS</b> 2P, 1M, 0.8um,ThnEP/Si,ThnOx NdPdDS Passivation w/Nov TEOS Oxide-OxyNitride							

Summary Data with Chi-Square Distribution Assumed.  
 Stress Ambient Temperature and Voltage to  
 Field Ambient Temperature And Voltage

Cf:   
 Ea:   
 β:

Tuse:   
 Vuse:

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
30255	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS	75	500	HRS	0
		125C, 7.0 VOLTS	75	1000	HRS	0
		TOTAL:			FAIL RATE (Fits): 13	DEVICE HRS: 7.07E+07
30252	ULTRASOUND	J-STD-020	4	2	DYS	0
		TOTAL:				0
30253	STORAGE LIFE MOISTURE SOAK CONVECTION REFLOW	125C	239	24	HRS	
		30C/60% R.H.	239	192	HRS	
		220C	239	3	PASS	0
		TOTAL:				0
30254	PRECONDITION U/S	J-STD-020	4	2	DYS	0
		TOTAL:				0
30256	TEMP CYCLE	-55C TO 125C	50	500	CYS	0
			50	1000	CYS	0
		TOTAL:				0
30257	HAST	130C, 85%R.H.,5.5V	59	96	HRS	0
		TOTAL:				0

PROJECT NO: 24681