

## RELIABILITY MONITOR

### DS1100Z-25 OCT '01 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1100	A3	0126	DK114601ADC	8	SOIC	150x1.4	ATP (Amkor, PI)
<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:   
 Vuse:

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
28535	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS	77	336	HRS	0
		125C, 6.0 VOLTS	77	1000	HRS	0
		TOTAL:			FAIL RATE (Fits): 13	DEVICE HRS: 7.26E+07
28532	ULTRASOUND	J-STD-020	4	1	DYS	0
		TOTAL:				0
28533	STORAGE LIFE MOISTURE SOAK CONVECTION REFLOW	125C	238	24	HRS	
		85 C/85% R.H.	238	168	HRS	
		235C	238	3	PASS	0
		TOTAL:				0
28534	PRECONDITION U/S	J-STD-020	4	1	DYS	0
		TOTAL:				0
28536	TEMP CYCLE	-55C TO 125C	40	300	CYS	0
			40	1000	CYS	0
		TOTAL:				0
28537	BIASED MOISTURE	85/85, 5.5 VOLTS	77	500	HRS	0
			75	1000	HRS	0
		TOTAL:				0

PROJECT NO: 19605

# RELIABILITY MONITOR

**DS1100Z-25 OCT '01 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>
DS1100	A3	0126	DK114601ADC	8	SOIC	150x1.4	ATP (Amkor, PI)
<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:	<input type="text" value="60%"/>	Tuse:	<input type="text" value="25 °C"/>
Ea:	<input type="text" value="0.7"/>	Vuse:	<input type="text" value="5.5 Volts"/>
β:	<input type="text" value="0"/>		

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
28538	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	40	168	HRS	0
<b>TOTAL:</b>						<b>0</b>

## RELIABILITY MONITOR

### DS1100Z-25 JAN '02 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1100	A3	0132	DK115002AKC	8	SOIC	150x1.4	ATP (Amkor, PI)
<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
28614	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS	77	336	HRS	0
		125C, 6.0 VOLTS	77	1000	HRS	0
		TOTAL:			FAIL RATE (Fits): 13	DEVICE HRS: 7.26E+07
28611	ULTRASOUND	J-STD-020	4	1	DYS	0
		TOTAL:				0
28612	STORAGE LIFE MOISTURE SOAK CONVECTION REFLOW	125C	238	24	HRS	
		85 C/85% R.H.	238	168	HRS	
		235C	238	3	PASS	0
		TOTAL:				0
28613	PRECONDITION U/S	J-STD-020	4	1	DYS	0
		TOTAL:				0
28615	TEMP CYCLE	-55C TO 125C	40	300	CYS	0
			40	1000	CYS	0
		TOTAL:				0
28616	BIASED MOISTURE	85/85, 5.5 VOLTS	77	500	HRS	0
			77	1000	HRS	0
		TOTAL:				0

PROJECT NO: 20890

# RELIABILITY MONITOR

## DS1100Z-25 JAN '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>
DS1100	A3	0132	DK115002AKC	8	SOIC	150x1.4	ATP (Amkor, PI)
<b>PROCESS</b>		D6W-1P2M,HPVt,E2,TCZ PBL:GOI		Passivation w/Nov TEOS Oxide-Nitride			

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**

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
28617	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	39	168	HRS	0
<b>TOTAL:</b>						<b>0</b>

PROJECT NO: 20890

## RELIABILITY MONITOR

### DS1100Z-25 JUL '02 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1100	A3	0230	DE120202AFB	8	SOIC	150x1.4	OSEP
<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
30192	HIGH VOLTAGE 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
30189	ULTRASOUND	J-STD-020	4	1	DYS	0
		TOTAL:				0
30190	STORAGE LIFE	125C	241	24	HRS	
	MOISTURE SOAK	85 C/85% R.H.	241	168	HRS	
	CONVECTION REFLOW	235C	241	3	PASS	0
	TOTAL:					0
30191	PRECONDITION U/S	J-STD-020	4	1	DYS	0
		TOTAL:				0
30193	TEMP CYCLE	-55C TO 125C	40	500	CYS	0
			40	1000	CYS	0
		TOTAL:				0
30194	BIASED MOISTURE	85/85, 5.5 VOLTS	77	500	HRS	0
			77	1000	HRS	0
		TOTAL:				0

PROJECT NO: 24619

# RELIABILITY MONITOR

**DS1100Z-25 JUL '02 MONITOR**

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1100	A3	0230	DE120202AFB	8	SOIC	150x1.4	OSEP
<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:	<input type="text" value="60%"/>	Tuse:	<input type="text" value="25 °C"/>
Ea:	<input type="text" value="0.7"/>	Vuse:	<input type="text" value="5.5 Volts"/>
β:	<input type="text" value="0"/>		

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
30195	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	40	168	HRS	0
<b>TOTAL:</b>						<b>0</b>

# RELIABILITY MONITOR

## DS1100Z-25 JAN '03 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1100	A3	0243	DM242094AJC	8	SOIC	150x1.4	Carsem
<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
30770	HIGH VOLTAGE 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
30767	ULTRASOUND	J-STD-020	4	1	DYS	0
		TOTAL:				0
30768	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
30769	PRECONDITION U/S	J-STD-020	4	1	DYS	0
		TOTAL:				0
30771	TEMP CYCLE	-55C TO 125C	40	500	CYS	0
			40	1000	CYS	0
		TOTAL:				0
30772	BIASED MOISTURE	85/85, 5.5 VOLTS	77	500	HRS	0
			77	1000	HRS	0
		TOTAL:				0

PROJECT NO: 25544

# RELIABILITY MONITOR

**DS1100Z-25 JAN '03 MONITOR**

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1100	A3	0243	DM242094AJC	8	SOIC	150x1.4	Carsem
<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:	<input type="text" value="60%"/>	Tuse:	<input type="text" value="25 °C"/>
Ea:	<input type="text" value="0.7"/>	Vuse:	<input type="text" value="5.5 Volts"/>
β:	<input type="text" value="0"/>		

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
30773	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	40	168	HRS	0
<b>TOTAL:</b>						<b>0</b>

# RELIABILITY MONITOR

## DS1100Z-25 APR '03 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1100	A3	0312	DK242100AHC	8	SOIC	150x1.4	ATP (Amkor, PI)
<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
31254	HIGH TEMP OP LIFE	125C, 5.5 VOLTS	80	500	HRS	0
		125C, 5.5 VOLTS	80	1000	HRS	0
		TOTAL:	12	DEVICE HRS: 7.55E+07		0
31251	ULTRASOUND	J-STD-020	4	1	DYS	0
		TOTAL:				0
31252	STORAGE LIFE MOISTURE SOAK CONVECTION REFLOW	125C	241	24	HRS	0
		85 C/85% R.H.	241	168	HRS	0
		235C	241	3	PASS	0
		TOTAL:				0
31253	PRECONDITION U/S	J-STD-020	4	1	DYS	0
		TOTAL:				0
31255	TEMP CYCLE	-55C TO 125C	40	500	CYS	0
			40	1000	CYS	0
		TOTAL:				0
31256	BIASED MOISTURE	85/85, 5.5 VOLTS	77	500	HRS	0
			77	1000	HRS	0
		TOTAL:				0

PROJECT NO: 26479

# RELIABILITY MONITOR

## DS1100Z-25 APR '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>
DS1100	A3	0312	DK242100AHC	8	SOIC	150x1.4	ATP (Amkor, PI)
<b>PROCESS</b>		D6W-1P2M,HPVt,E2,TCZ PBL:GOI		Passivation w/Nov TEOS Oxide-Nitride			

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**

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
31257	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	39	168	HRS	0
<b>TOTAL:</b>						<b>0</b>

PROJECT NO: 26479

# RELIABILITY MONITOR

## DS1232L JUL '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>
DS1232	C2-L	0111	DE049638ADB	8	SOIC	150x1.4	OSEP
<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
30185	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS	79	500	HRS	0
		125C, 7.0 VOLTS	79	1000	HRS	0
		TOTAL:			FAIL RATE (Fits): 12	DEVICE HRS: 7.45E+07
30182	ULTRASOUND	J-STD-020	4	1	DYS	0
		TOTAL:				0
30183	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
30184	PRECONDITION U/S	J-STD-020	4	7	DYS	0
		TOTAL:				0
30186	TEMP CYCLE	-55C TO 125C	40	500	CYS	0
			40	1000	CYS	0
		TOTAL:				0
30187	HAST	130C, 85%R.H.,5.5V	77	96	HRS	0
		TOTAL:				0
30188	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	40	168	HRS	0

PROJECT NO: 24602

# RELIABILITY MONITOR

**DS1232L JUL '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>
DS1232	C2-L	0111	DE049638ADB	8	SOIC	150x1.4	OSEP
<b>PROCESS</b> 1P, 1M, 0.8um, PdplDiode, Low Vts , Passivation w/Nov TEOS Oxide-Nitride							

Summary Data with Chi-Square Distribution Assumed.	Cf:	60%	Tuse:	25 °C
Stress Ambient Temperature and Voltage to	Ea:	0.7	Vuse:	5.5 Volts
Field Ambient Temperature And Voltage	β:	0		

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
<b>TOTAL:</b>						<b>0</b>

**PROJECT NO: 24602**

## RELIABILITY MONITOR

### DS1232L JAN '03 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1232	C2-L	0252	DK235629ABA	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
30758	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
30755	ULTRASOUND	J-STD-020	4	1	DYS	0
		TOTAL:				0
30756	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
30757	PRECONDITION U/S	J-STD-020	4	7	DYS	0
		TOTAL:				0
30759	TEMP CYCLE	-55C TO 125C	40	500	CYS	0
			40	1000	CYS	0
		TOTAL:				0
30760	HAST	130C, 85%R.H.,5.5V	77	96	HRS	2

PROJECT NO: 25545

# RELIABILITY MONITOR

## DS1232L JAN '03 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1232	C2-L	0252	DK235629ABA	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.	Cf:	60%	Tuse:	25 °C
Stress Ambient Temperature and Voltage to	Ea:	0.7	Vuse:	5.5 Volts
Field Ambient Temperature And Voltage	β:	0		

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
<b>TOTAL:</b>						<b>2</b>
<b>FAILURE MODE</b>	<b>VERIFICATION</b>	<b>FA NUMBER</b>	<b>FAILURE MECHANISM</b>			
PB_RESIST	(#1) Part submitted to FA by Richard Byrd, 8/15/03.	30014717				
LEVELS	(#2) Part submitted to FA by Richard Byrd, 8/15/03.	30014719				
30761	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	40	168	HRS	0
<b>TOTAL:</b>						<b>0</b>

PROJECT NO: 25545

# RELIABILITY MONITOR

## DS1232L APR '03 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1232	C2-L	0310	DM304031AHB	8	SOIC	150x1.4	Carsem
<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:

**NO OF FAILS**

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
31302	HIGH TEMP OP LIFE	125C, 5.5 VOLTS	80	500	HRS	0
TOTAL:			24	FAIL RATE (Fits): DEVICE HRS: 3.77E+07		0
31299	ULTRASOUND	J-STD-020	4	1	DYS	0
TOTAL:						0
31300	STORAGE LIFE	125C	241	24	HRS	
	MOISTURE SOAK	85 C/85% R.H.	241	168	HRS	
	CONVECTION REFLOW	235C	241	3	PASS	0
TOTAL:						0
31301	PRECONDITION U/S	J-STD-020	4	7	DYS	0
TOTAL:						0
31303	TEMP CYCLE	-55C TO 125C	40	500	CYS	0
			40	1000	CYS	
TOTAL:						0
31304	HAST	130C, 85%R.H.,5.5V	77	96	HRS	0
TOTAL:						0
31305	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	40	168	HRS	0
TOTAL:						0

**PROJECT NO:** 26499

# RELIABILITY MONITOR

## DS1233Z-010 APR '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>
DS1233	A5-500	0311	DU321432DC	3	SOT223	140x1.7	Hana
<b>PROCESS</b> 1P, 1M, 1.2um, ZTC P1, Ndepletion ,L Passivation w/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
31309	HIGH TEMP OP LIFE	125C, 5.5 VOLTS	80	500	HRS	0
TOTAL:			24	FAIL RATE (Fits):	3.77E+07	0
31306	ULTRASOUND	J-STD-020	4	1	DYS	0
TOTAL:						0
31307	STORAGE LIFE	125C	241	24	HRS	
	MOISTURE SOAK	85 C/85% R.H.	241	168	HRS	
	CONVECTION REFLOW	235C	241	3	PASS	0
TOTAL:						0
31308	PRECONDITION U/S	J-STD-020	4	2	DYS	0
TOTAL:						0
31310	TEMP CYCLE	-55C TO 125C	40	500	CYS	
			40	1000	CYS	0
TOTAL:						0
31311	HAST	130C, 85%R.H.,5.5V	77	96	HRS	0
TOTAL:						0
31312	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	40	168	HRS	0
TOTAL:						0

**PROJECT NO:** 21798

# RELIABILITY MONITOR

## DS1267-010 AUG '02 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1267	A1	0237	DM234023AFB	20	TSSOP	4.4x0.9	Carsem
<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
30199	HIGH VOLTAGE LIFE	125C, 6.0 V, -4.0V	79	500	HRS	0
		125C, 6.0 V, -4.0V	79	1000	HRS	0
		TOTAL:			FAIL RATE (Fits): 12	DEVICE HRS: 7.45E+07
30196	ULTRASOUND	J-STD-020	4	5	DYS	0
		TOTAL:				0
30197	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
30198	PRECONDITION U/S	J-STD-020	4	2	DYS	0
		TOTAL:				0
30200	TEMP CYCLE	-55C TO 125C	40	500	CYS	0
			40	1000	CYS	0
		TOTAL:				0
30201	BIASED MOISTURE	85/85, 5.5 VOLTS	77	500	HRS	0
			77	1000	HRS	0
		TOTAL:				0

PROJECT NO: 24618

# RELIABILITY MONITOR

## DS1267-010 AUG '02 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1267	A1	0237	DM234023AFB	20	TSSOP	4.4x0.9	Carsem
<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
30202	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	40	96	HRS	5
<b>TOTAL:</b>						<b>5</b>

FAILURE MODE	VERIFICATION	FA NUMBER	FAILURE MECHANISM
ICCSTANDBY	(#1-4) Submitted to FA by Richard Byrd, 8/15/03.	30014720	
CLKTOCUT	(#5) Submitted to FA by Richard Byrd, 8/15/03.	30014721	

PROJECT NO: 24618

# RELIABILITY MONITOR

## DS1620 JAN '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	0249	DU218037AAA	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
30750	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS	80	500	HRS	0
		125C, 7.0 VOLTS	78	1000	HRS	0
		TOTAL:				FAIL RATE (Fits): 12
30747	ULTRASOUND	J-STD-020	4	7	DYS	0
		TOTAL:				
30748	STORAGE LIFE MOISTURE SOAK CONVECTION REFLOW	125C	244	24	HRS	
		85 C/85% R.H.	244	168	HRS	
		235C	244	3	PASS	0
		TOTAL:				
30749	PRECONDITION U/S	J-STD-020	4	7	DYS	0
		TOTAL:				
30751	TEMP CYCLE	-55C TO 125C	40	500	CYS	0
			40	1000	CYS	0
		TOTAL:				
30752	BIASED MOISTURE	85/85, 5.5 VOLTS	70	500	HRS	0
			70	1000	HRS	0
		TOTAL:				

PROJECT NO: 25540

# RELIABILITY MONITOR

## DS1620 JAN '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	0249	DU218037AAA	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
30753	WRITE CYCLE STRESS	85 C, 7.0 VOLTS	50	50	KCYS	0
TOTAL:						0
30754	STORAGE LIFE	150C	50	500	HRS	0
TOTAL:						0

PROJECT NO: 25540

# RELIABILITY MONITOR

## DS1620 APR '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	0310	DJ232810AAB	8	SOIC	150x1.4	NSEB
<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
31323	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	
31321	STORAGE LIFE MOISTURE SOAK CONVECTION REFLOW	125C	244	24	HRS	
		85 C/85% R.H.	244	168	HRS	
		235C	244	3	PASS	0
		TOTAL:				0
31322	PRECONDITION U/S	J-STD-020	4	7	DYS	0
		TOTAL:				0
31324	TEMP CYCLE	-55C TO 125C	40	500	CYS	0
			40	1000	CYS	0
		TOTAL:				0
31325	BIASED MOISTURE	85/85, 5.5 VOLTS	70	500	HRS	0
			70	1000	HRS	0
		TOTAL:				0
31326	WRITE CYCLE STRESS	85 C, 5.5 VOLTS	50	50	KCYS	0
		TOTAL:				0

PROJECT NO: 26500

# RELIABILITY MONITOR

## DS1620 APR '03 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1620	D1	0310	DJ232810AAB	8	SOIC	150x1.4	NSEB
<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
31327	STORAGE LIFE	150C	50	500	HRS	0
			50	1000	HRS	0
<b>TOTAL:</b>						<b>0</b>

# RELIABILITY MONITOR

## DS1621 MAR '03 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1621	A7	0237	DE106688AAB	8	SOIC	150x1.4	OSEP
<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
30966	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
30963	ULTRASOUND	J-STD-020	4	7	DYS	0
		TOTAL:				0
30964	STORAGE LIFE MOISTURE SOAK CONVECTION REFLOW	125C	240	24	HRS	
		85 C/85% R.H.	240	168	HRS	
		235C	240	3	PASS	0
		TOTAL:				0
30965	PRECONDITION U/S	J-STD-020	4	7	DYS	0
		TOTAL:				0
30967	TEMP CYCLE	-55C TO 125C	40	500	CYS	0
			40	1000	CYS	0
		TOTAL:				0
30968	BIASED MOISTURE	85/85, 5.5 VOLTS	70	500	HRS	0
			70	1000	HRS	0
		TOTAL:				0

PROJECT NO: 25960

# RELIABILITY MONITOR

## DS1621 MAR '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>
DS1621	A7	0237	DE106688AAB	8	SOIC	150x1.4	OSEP
<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
30969	WRITE CYCLE STRESS	85 C, 7.0 VOLTS	50	50	KCYS	0
TOTAL:						0
30970	STORAGE LIFE	150C	50	500	HRS	0
TOTAL:						0

PROJECT NO: 25960

# RELIABILITY MONITOR

## DS2118M MAR '03 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2118M	C1-6"	0233	DN108304ABC	36	SSOP	7.5x2.4	ATK (Amkor, K)
PROCESS		D6S-1P1M,HPVt,N+ESD,TCN3 ALOCO Laser/Nit - Pass/Nit - General LaserPrb					

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
31035	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS	75	500	HRS	1
		125C, 6.0 VOLTS	73	1000	HRS	0
TOTAL:			FAIL RATE (Fits): 29	DEVICE HRS: 6.98E+07		1

FAILURE MODE	VERIFICATION	FA NUMBER	FAILURE MECHANISM
BIN 3	(#2) Submitted to FA by Richard Byrd, 8/15/03.	30014722	
BIN 21	(#1)		

31032	ULTRASOUND	J-STD-020	4	6	DYS	0
TOTAL:						0
31033	STORAGE LIFE	125C	238	48	HRS	
	MOISTURE SOAK	85 C/85% R.H.	238	168	HRS	
	CONVECTION REFLOW	235C	238	3	PASS	
TOTAL:						

FAILURE MODE	VERIFICATION	FA NUMBER	FAILURE MECHANISM
RSE-SE	(#1 UNIT PASSED RETEST - KENNY BUN 4/9/2003)		
ITPS ISO	(#2,3 BOTH PASSED RETEST)		

31034	PRECONDITION U/S	J-STD-020	4	6	DYS	0
TOTAL:						0
31036	TEMP CYCLE	-55C TO 125C	77	500	CYS	0

PROJECT NO: 24899

# RELIABILITY MONITOR

## DS2118M MAR '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"	0233	DN108304ABC	36	SSOP	7.5x2.4	ATK (Amkor, K)
<b>PROCESS</b> D6S-1P1M,HPVt,N+ESD,TCN3 ALOCO Laser/Nit - Pass/Nit - General LaserPrb							

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
			77	1000	CYS	0
		TOTAL:				0
31037	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	77	168	HRS	0
		TOTAL:				0

PROJECT NO: 24899

# RELIABILITY MONITOR

**DS21352 AUG '02 MONITOR, D.P.**

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS21352	A4	0240	DC039494AAA	100	LQFP	14x14x	Stats
<b>PROCESS</b> 2P, 2M, 0.6um, P2Cap, PdD, HP Vts, GO 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:	<input type="text" value="60%"/>	Tuse:	<input type="text" value="25 °C"/>
Ea:	<input type="text" value="0.7"/>	Vuse:	<input type="text" value="5.5 Volts"/>
β:	<input type="text" value="0"/>		

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
30219	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS	77	500	HRS	0
		125C, 6.0 VOLTS	77	1000	HRS	0
TOTAL:			13	DEVICE HRS: 7.26E+07		0
<b>FAILURE MODE</b>		<b>VERIFICATION</b>	<b>FA NUMBER</b>	<b>FAILURE MECHANISM</b>		
IBO2_3V		(#1,2)				
30216	ULTRASOUND	J-STD-020	4	2	DYS	0
		TOTAL:				
30217	STORAGE LIFE	125C	241	24	HRS	
	MOISTURE SOAK	30C/60% R.H.	241	192	HRS	
	CONVECTION REFLOW	235C	241	3	PASS	0
TOTAL:						0
30218	PRECONDITION U/S	J-STD-020	4	5	DYS	0
		TOTAL:				
30220	TEMP CYCLE	-55C TO 125C	77	500	CYS	0
			77	1000	CYS	0
		TOTAL:				
30221	HAST, NO BIAS	130C, 85% R.H.	72	96	HRS	0
		TOTAL:				

**PROJECT NO: 24622**

# RELIABILITY MONITOR

## DS2154 NOV '02 MONITOR, D.P.

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2154	A2	0230	DC102671AAA	100	LQFP	14x14x	Stats
<b>PROCESS</b> D8R-2P2M,HPVt,NDROM,N+ESD,Laser 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
30236	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS	80	500	HRS	2
		125C, 6.0 VOLTS	77	1000	HRS	0
TOTAL:			42	DEVICE HRS: 7.36E+07		2

FAIL RATE (Fits): 42 DEVICE HRS: 7.36E+07

FAILURE MODE	VERIFICATION	FA NUMBER	FAILURE MECHANISM
RCHANB	(#1,2) PARTS SUBMITTED TO FA BY RICHARD BYRD, 4/21/03	30011723	

30233	ULTRASOUND	J-STD-020	4	2	DYS	0
TOTAL:						0
30234	STORAGE LIFE	125C	241	24	HRS	
	MOISTURE SOAK	30C/60% R.H.	241	192	HRS	
	CONVECTION REFLOW	235C	241	3	PASS	0
TOTAL:						0
30235	PRECONDITION U/S	J-STD-020	4	5	DYS	0
TOTAL:						0
30237	TEMP CYCLE	-55C TO 125C	78	500	CYS	0
			78	1000	CYS	0
TOTAL:						0
30238	HAST, NO BIAS	130C, 85% R.H.	77	200	HRS	0

**PROJECT NO:** 24658

# RELIABILITY MONITOR

**DS2154 NOV '02 MONITOR, D.P.**

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2154	A2	0230	DC102671AAA	100	LQFP	14x14x	Stats
<b>PROCESS</b> D8R-2P2M,HPVt,NDR0M,N+ESD,Laser 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**

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	FAILS
--------	----------	-----------	----------	-----------	-------	-------

TOTAL:

0

PROJECT NO: 24658

# RELIABILITY MONITOR

## DS80C320 DEC '02 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS80C320	C5	0230	DK240563AB	40	PDIP	600	ATP (Amkor, PI)
<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
30259	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS	77	500	HRS	0
		125C, 7.0 VOLTS	77	1000	HRS	0
		<b>TOTAL:</b>			<b>FAIL RATE (Fits):</b> 13	<b>DEVICE HRS: 7.26E+07</b>
30260	TEMP CYCLE	-55C TO 125C	45	500	CYS	0
			45	1000	CYS	0
		<b>TOTAL:</b>				
30261	BIASED MOISTURE	85/85, 5.5 VOLTS	77	500	HRS	0
			77	1000	HRS	0
		<b>TOTAL:</b>				
30262	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	45	96	HRS	0
		<b>TOTAL:</b>				0

**PROJECT NO:** 24680