

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)
PROCESS		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	HOUR	0
		125C, 6.0 VOLTS	77	1000	HOUR	0
		TOTAL:			FAIL RATE (Fits): 13	DEVICE HRS: 7.26E+07
28532	ULTRASOUND	J-STD-020	4			0
		TOTAL:				0
28533	STORAGE LIFE	125C	238	24	HOUR	
	MOISTURE SOAK	85 C/85% R.H.	238	168	HOUR	
	CONVECTION REFLOW	235C	238	3	PASS	0
	TOTAL:					0
28534	PRECONDITION U/S	J-STD-020	4			0
		TOTAL:				0
28536	TEMP CYCLE	-55C TO 125C	40	300	CYCL	0
			40	1000	CYCL	0
		TOTAL:				0
28538	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	40	168	HOUR	0
		TOTAL:				0

PROJECT NO: 19605

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)
PROCESS		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
28614	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS	77	336	HOUR	0
		125C, 6.0 VOLTS	77	1000	HOUR	0
		TOTAL:			FAIL RATE (Fits): 13	DEVICE HRS: 7.26E+07
28611	ULTRASOUND	J-STD-020	4			0
		TOTAL:				0
28612	STORAGE LIFE MOISTURE SOAK CONVECTION REFLOW	125C	238	24	HOUR	
		85 C/85% R.H.	238	168	HOUR	
		235C	238	3	PASS	0
		TOTAL:				0
28613	PRECONDITION U/S	J-STD-020	4			0
		TOTAL:				0
28615	TEMP CYCLE	-55C TO 125C	40	300	CYCL	0
			40	1000	CYCL	0
		TOTAL:				0
28617	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	39	168	HOUR	0
		TOTAL:				0

PROJECT NO: 20890

RELIABILITY MONITOR

DS1803-010 NOV '01 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1803	A2	0143	DK122629AAB	16	SOIC	150x1.4	ATP (Amkor, PI)
PROCESS 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:	60%	Tuse:	25 °C
Ea:	0.7	Vuse:	5.5 Volts
β:	0		

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
28558	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS	80	336	HOUR	0
		TOTAL:	36	DEVICE HRS: 2.54E+07		0
28555	ULTRASOUND	J-STD-020	4			0
		TOTAL:				0
28556	STORAGE LIFE	125C	241	24	HOUR	
	MOISTURE SOAK	85 C/85% R.H.	241	168	HOUR	
	CONVECTION REFLOW	235C	241	3	PASS	0
		TOTAL:				0
28557	PRECONDITION U/S	J-STD-020	4			0
		TOTAL:				0
28559	TEMP CYCLE	-55C TO 125C	40	300	CYCL	0
			40	1000	CYCL	0
		TOTAL:				0
28560	BIASED MOISTURE	85/85, 5.5 VOLTS	77	274	HOUR	0
			77	959	HOUR	0
		TOTAL:				0
28561	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	37	168	HOUR	0

PROJECT NO: 20883

RELIABILITY MONITOR

DS1803-010 NOV '01 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1803	A2	0143	DK122629AAB	16	SOIC	150x1.4	ATP (Amkor, PI)
PROCESS 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
TOTAL:						0

RELIABILITY MONITOR

DS1803-010 APR '02 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1803	A2	0204	DE113317AAB	16	SOIC	150x1.4	OSEP
PROCESS 1P, 2M, 0.8um, PdplDiode, Ti/TiN M1+M2 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
29506	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS	80	500	HOUR	0
		125C, 7.0 VOLTS	80	1000	HOUR	0
		TOTAL:		FAIL RATE (Fits): 12	DEVICE HRS: 7.55E+07	
29503	ULTRASOUND	J-STD-020	4			0
		TOTAL:				0
29504	STORAGE LIFE MOISTURE SOAK CONVECTION REFLOW	125C	241	24	HOUR	
		85 C/85% R.H.	241	168	HOUR	
		235C	241	3	PASS	0
		TOTAL:				0
29505	PRECONDITION U/S	J-STD-020	4			0
		TOTAL:				0
29507	TEMP CYCLE	-55C TO 125C	40	500	CYCL	0
			40	1000	CYCL	0
		TOTAL:				0
29508	BIASED MOISTURE	85/85, 5.5 VOLTS	77	500	HOUR	0
			76	1000	HOUR	0
		TOTAL:				0

PROJECT NO: 21799

RELIABILITY MONITOR

DS1803-010 APR '02 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1803	A2	0204	DE113317AAB	16	SOIC	150x1.4	OSEP
PROCESS 1P, 2M, 0.8um, PdplDiode, WJ 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
29509	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	39	168	HOUR	0
TOTAL:						0

PROJECT NO: 21799

RELIABILITY MONITOR

DS2118M MAR '02 MONITOR, D.P.

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2118M	C1	0143	DN120700ABB	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:
 Ea:
 β:

Tuse:
 Vuse:

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
28819	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS	77	336	HOUR	0
		125C, 6.0 VOLTS	77	1000	HOUR	0
		TOTAL:			FAIL RATE (Fits): 13	DEVICE HRS: 7.26E+07
28816	ULTRASOUND	J-STD-020	4			0
		TOTAL:				0
28817	STORAGE LIFE	125C	238	48	HOUR	
	MOISTURE SOAK	85 C/85% R.H.	238	168	HOUR	
	CONVECTION REFLOW	235C	238	3	PASS	4
	TOTAL:					4
	FAILURE MODE	VERIFICATION	FA NUMBER	FAILURE MECHANISM		
	IIH	INPUT LEAKAGE HIGH (4)				
28818	PRECONDITION U/S	J-STD-020	4			0
		TOTAL:				0
28820	TEMP CYCLE	-55C TO 125C	80	300	CYCL	0
			80	1000	CYCL	0
		TOTAL:				0
28821	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	73	168	HOUR	0
		TOTAL:				0

PROJECT NO: 21344

RELIABILITY MONITOR

DS2118M MAR '02 MONITOR, D.P.

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2118M	C1	0143	DN120700ABB	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.

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
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PROJECT NO: 21344

RELIABILITY MONITOR

DS21Q43A SEP '01 MONITOR, D.P.

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS21Q43	A3-A	0047	DC036714AAD	128	LQFP	14x20x	Stats
PROCESS 1P, 1M, 0.6um, Pdepletion, 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
27880	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS	70	336	HOUR	0
		125C, 6.0 VOLTS	70	1000	HOUR	0
		TOTAL:			FAIL RATE (Fits): 14	DEVICE HRS: 6.60E+07
27877	ULTRASOUND	J-STD-020	4			0
		TOTAL:				0
27878	STORAGE LIFE MOISTURE SOAK CONVECTION REFLOW	125C	241	24	HOUR	
		60C/60% R.H.	241	40	HOUR	
		235C	241	3	PASS	0
		TOTAL:				0
27879	PRECONDITION U/S	J-STD-020	4			0
		TOTAL:				0
27881	TEMP CYCLE	-55C TO 125C	77	300	CYCL	0
			76	1000	CYCL	0
		TOTAL:				0
27882	BIASED MOISTURE	85/85, 5.5 VOLTS	32	274	HOUR	0
			32	959	HOUR	0
		TOTAL:				0

PROJECT NO: 19205

RELIABILITY MONITOR

DS21Q43A SEP '01 MONITOR, D.P.

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS PACKAGE	WIDTH ASSEMBLY SITE
DS21Q43	A3-A	0047	DC036714AAD	128 LQFP	14x20x Stats
PROCESS 1P, 1M, 0.6um, Pdepletion, Low Vts , Passivation w/Nov TEOS Oxide-Nitride					

Summary Data with Chi-Square Distribution Assumed.	Cf: <input style="width: 50px;" type="text" value="60%"/>	Tuse: <input style="width: 50px;" type="text" value="25 °C"/>
Stress Ambient Temperature and Voltage to	Ea: <input style="width: 50px;" type="text" value="0.7"/>	Vuse: <input style="width: 50px;" type="text" value="5.5 Volts"/>
Field Ambient Temperature And Voltage	β: <input style="width: 50px;" type="text" value="0"/>	

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
27883	HAST, NO BIAS	130C, 85% R.H.	40	100	HOUR	0
TOTAL:						0

PROJECT NO: 19205

RELIABILITY MONITOR

DS21S07 FEB '02 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS21S07	C1-A	0112	DM048483ACB	20	TSSOP	4.4x0.9	Carsem
PROCESS 1P, 1M, 0.8um,Neg ZTC P1R,PdpID,Low 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:
 Ea:
 β:

Tuse: °C
 Vuse: Volts

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
28808	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS	77	336	HOUR	0
		125C, 7.0 VOLTS	77	1000	HOUR	0
		TOTAL:			FAIL RATE (Fits): 13	DEVICE HRS: 7.26E+07
28805	ULTRASOUND	J-STD-020	4			0
		TOTAL:				0
28806	STORAGE LIFE MOISTURE SOAK CONVECTION REFLOW	125C	243	48	HOUR	
		85 C/85% R.H.	243	168	HOUR	
		235C	243	3	PASS	0
		TOTAL:				0
28807	PRECONDITION U/S	J-STD-020	4			0
		TOTAL:				0
28809	TEMP CYCLE	-55C TO 125C	45	300	CYCL	0
			45	1000	CYCL	0
		TOTAL:				0
28810	BIASED MOISTURE	85/85, 5.5 VOLTS	77	274	HOUR	0
			77	959	HOUR	0
		TOTAL:				0

PROJECT NO: 21346

RELIABILITY MONITOR

DS21S07 FEB '02 MONITOR						
DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH ASSEMBLY SITE
DS21S07	C1-A	0112	DM048483ACB	20	TSSOP	4.4x0.9 Carsem
PROCESS 1P, 1M, 0.8um,Neg ZTC P1R,PdpID,Low Laser/Nit - Pass/Nit - General LaserPrb						

Summary Data with Chi-Square Distribution Assumed.	Cf: <input style="width: 50px;" type="text" value="60%"/>	Tuse: <input style="width: 50px;" type="text" value="25 °C"/>
Stress Ambient Temperature and Voltage to	Ea: <input style="width: 50px;" type="text" value="0.7"/>	Vuse: <input style="width: 50px;" type="text" value="5.5 Volts"/>
Field Ambient Temperature And Voltage	β: <input style="width: 50px;" type="text" value="0"/>	

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
28811	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED	34	168	HOUR	0
TOTAL:						0

RELIABILITY MONITOR

DS80CH11 DEC '01 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS80CH11	A4	0113	DN036754AA	128	LQFP	14x20x	ATK (Amkor, K)
PROCESS 1P, 2M, 0.6um,SilP1,NdA,PD,Ti/TiN M1+ 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
28601	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS	80	336	HOUR	0
		125C, 6.0 VOLTS	80	1000	HOUR	0
		TOTAL:			FAIL RATE (Fits): 12	DEVICE HRS: 7.55E+07
28598	ULTRASOUND	J-STD-020	4			0
		TOTAL:				0
28599	STORAGE LIFE	125C	244	24	HOUR	
	MOISTURE SOAK	30C/60% R.H.	244	192	HOUR	
	CONVECTION REFLOW	235C	244	3	PASS	1
	TOTAL:					1
	FAILURE MODE	VERIFICATION	FA NUMBER	FAILURE MECHANISM		
	HI_ADC_4K_RA	OFFSET	NONE			
28600	PRECONDITION U/S	J-STD-020	4			0
		TOTAL:				0
28602	TEMP CYCLE	-55C TO 125C	70	300	CYCL	0
			69	1000	CYCL	0
		TOTAL:				0
28603	BIASED MOISTURE	85/85, 5.5 VOLTS	31	274	HOUR	0
			31	959	HOUR	0

PROJECT NO: 20887

RELIABILITY MONITOR

DS80CH11 DEC '01 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS80CH11	A4	0113	DN036754AA	128	LQFP	14x20x	ATK (Amkor, K)
PROCESS 1P, 2M, 0.6um,SilP1,NdA,PD,Ti/TiN M1+ 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
TOTAL:						0
28604	HAST, NO BIAS	130C, 85% R.H.	44	100	HOUR	0
TOTAL:						0

PROJECT NO: 20887

RELIABILITY MONITOR

DS87C520 FEB '02 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS87C520	A15-I	0206	DK101111AAA	44	PLCC	650x65	ATP (Amkor, PI)
PROCESS 2P, 1M, 0.8um,ThinEP/Sil,ThinOx NdPdD 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
28780	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS	77	336	HOUR	0
		125C, 7.0 VOLTS	77	1000	HOUR	0
		TOTAL:			FAIL RATE (Fits): 13	DEVICE HRS: 7.26E+07
28777	ULTRASOUND	J-STD-020	4			0
		TOTAL:				0
28778	STORAGE LIFE MOISTURE SOAK CONVECTION REFLOW	125C	239	24	HOUR	
		30C/60% R.H.	239	192	HOUR	
		220C	239	3	PASS	0
		TOTAL:				0
28779	PRECONDITION U/S	J-STD-020	4			0
		TOTAL:				0
28781	TEMP CYCLE	-55C TO 125C	50	300	CYCL	0
			50	1000	CYCL	0
		TOTAL:				0
28782	HAST	130C, 85%R.H.,5.5V	58	96	HOUR	1
		TOTAL:				1

FAILURE MODE	VERIFICATION
EPROM	EPROM

FA NUMBER FAILURE MECHANISM

PROJECT NO: 21358

RELIABILITY MONITOR

DS87C520 FEB '02 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS87C520	A15-I	0206	DK101111AAA	44	PLCC	650x65	ATP (Amkor, PI)
PROCESS 2P, 1M, 0.8um, ThinEP/Sil, ThinOx NdPdD Passivation w/Nov TEOS Oxide-OxyNitride							

Summary Data with Chi-Square Distribution Assumed.	Cf: <input style="width: 50px;" type="text" value="60%"/>	Tuse: <input style="width: 50px;" type="text" value="25 °C"/>
Stress Ambient Temperature and Voltage to	Ea: <input style="width: 50px;" type="text" value="0.7"/>	Vuse: <input style="width: 50px;" type="text" value="5.5 Volts"/>
Field Ambient Temperature And Voltage	β: <input style="width: 50px;" type="text" value="0"/>	

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
28783	STORAGE LIFE	150C	50	336	HOUR	0
			50	1000	HOUR	0
TOTAL:						0