

RELIABILITY MONITOR

STRESS: WRITE CYCLE STRESS

CONDITIONS: 85 C, 7.0 VOLTS

PRODUCT	REV	MONITOR DATE	JOB NO	DATE ASSEMBLY CODE FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS1620	D1	JUL '02	30105	0114 CPS (ChipPac, China)	DH052446AAF	SOIC	50	50	0
DS1620	D1	JAN '03	30753	0249 Hana	DU218037AA	SOIC	50	50	0
DS1621	A7	SEP '02	30120	0232 ATP (Amkor, PI)	DK103506AA	SOIC	50	50	0

RELIABILITY MONITOR

STRESS: ULTRASOUND

CONDITIONS: J-STD-020

PRODUCT	REV	MONITOR DATE	JOB NO	DATE CODE	ASSEMBLY FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS1100	A3	OCT '01	28532	0126	ATP (Amkor, PI)	DK114601AD	SOIC	1	4	0
DS1100	A3	JAN '02	28611	0132	ATP (Amkor, PI)	DK115002AK	SOIC	1	4	0
DS1100	A3	JUL '02	30189	0230	OSEP	DE120202AFB	SOIC	1	4	0
DS1100	A3	JAN '03	30767	0243	Carsem	DM242094AJC	SOIC	1	4	0
DS1232	C2-L	JUL '02	30182	0111	OSEP	DE049638ADB	SOIC	1	4	0
DS1267	A1	AUG '02	30196	0237	Carsem	DM234023AF	TSSOP	5	4	0
DS1620	D1	JUL '02	30099	0114	CPS (ChipPac, China)	DH052446AAF	SOIC	7	4	0
DS1620	D1	JAN '03	30747	0249	Hana	DU218037AA	SOIC	7	4	0
DS1621	A7	SEP '02	30114	0232	ATP (Amkor, PI)	DK103506AA	SOIC	7	4	0
DS1621	A7	MAR '03	30963	0237	OSEP	DE106688AAB	SOIC	7	4	0
DS1803	A2	OCT '02	30226	0234	ATP (Amkor, PI)	DK236047AA	SOIC	2	4	0
DS21352	A4	AUG '02	30216	0240	Stats	DC039494AA	LQFP	2	4	0
DS2154	A2	NOV '02	30233	0230	Stats	DC102671AA	LQFP	2	4	0
DS2502	C4	JUL '02	30107	0238	OSEP	DE252080AEB	TSOC	2	4	0
DS2502	C4	JAN '03	30762	0249	OSEP	DE303581AAB	TSOC	2	4	0

RELIABILITY MONITOR

STRESS: TEMP CYCLE

CONDITIONS: -40 TO 85C

PRODUCT	REV	MONITOR DATE	JOB NO	DATE CODE	ASSEMBLY FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS12887	A2-	OCT '02	30224	0227	Fastech	331525	Module w/Bent Fra	300	100	0
DS12887	A2-	JAN '03	30745	0231	Fastech	331980	Module w/Bent Fra	300	100	0
DS1990	J3-F	NOV '02	30270	0238	Fastech	332428-1	iButton F50w/IC's	500	77	0
DS1992	E7-F	DEC '02	30265	0238	Fastech	332811-1	iButton F50 w/Bum	500	77	0

RELIABILITY MONITOR

STRESS: TEMP CYCLE

CONDITIONS: -55C TO 125C

PRODUCT	REV	MONITOR DATE	JOB NO	DATE CODE	ASSEMBLY FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS1100	A3	OCT '01	28536	0126	ATP (Amkor, PI)	DK114601AD	SOIC	300	40	0
DS1100	A3	OCT '01	28536	0126	ATP (Amkor, PI)	DK114601AD	SOIC	1000	40	0
DS1100	A3	JAN '02	28615	0132	ATP (Amkor, PI)	DK115002AK	SOIC	300	40	0
DS1100	A3	JAN '02	28615	0132	ATP (Amkor, PI)	DK115002AK	SOIC	1000	40	0
DS1267	A1	AUG '02	30200	0237	Carsem	DM234023AF	TSSOP	500	40	0
DS1302	A4	SEP '02	30179	0226	CPS (ChipPac, China)	DE244426AA	PDIP	500	45	0
DS1302	A4	SEP '02	30179	0226	CPS (ChipPac, China)	DE244426AA	PDIP	1000	45	0
DS1620	D1	JUL '02	30103	0114	CPS (ChipPac, China)	DH052446AAF	SOIC	500	40	2
DS1620	D1	JUL '02	30103	0114	CPS (ChipPac, China)	DH052446AAF	SOIC	1000	38	0
DS1620	D1	JAN '03	30751	0249	Hana	DU218037AA	SOIC	500	40	0
DS1620	D1	JAN '03	30751	0249	Hana	DU218037AA	SOIC	1000	40	0
DS1621	A7	SEP '02	30118	0232	ATP (Amkor, PI)	DK103506AA	SOIC	500	40	0
DS1621	A7	SEP '02	30118	0232	ATP (Amkor, PI)	DK103506AA	SOIC	1000	40	0
DS21352	A4	AUG '02	30220	0240	Stats	DC039494AA	LQFP	500	77	0
DS21352	A4	AUG '02	30220	0240	Stats	DC039494AA	LQFP	1000	77	0
DS2154	A2	NOV '02	30237	0230	Stats	DC102671AA	LQFP	500	78	0
DS2401	C2	AUG '02	30204	0245	Hana	DU218017AG	TO92	500	45	1
DS2401	C2	AUG '02	30204	0245	Hana	DU218017AG	TO92	1000	44	0
DS2502	C4	JUL '02	30110	0238	OSEP	DE252080AEB	TSOC	500	77	0
DS80C320	C5	DEC '02	30260	0230	ATP (Amkor, PI)	DK240563AB	PDIP	500	45	0
DS80C320	C5	DEC '02	30260	0230	ATP (Amkor, PI)	DK240563AB	PDIP	1000	45	0
DS87C520	A15-	DEC '02	30256	0232	ATP (Amkor, PI)	DK241602AA	PLCC	500	50	0

RELIABILITY MONITOR

STRESS: TEMP CYCLE

CONDITIONS: -55C TO 125C

PRODUCT	REV	MONITOR DATE	JOB NO	DATE ASSEMBLY CODE	FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS87C520	A15-	DEC '02	30256	0232	ATP (Amkor, PI)	DK241602AA	PLCC	1000	50	0

RELIABILITY MONITOR

STRESS: TEMP CYCLE

CONDITIONS: 0C TO 70C

PRODUCT	REV	MONITOR DATE	JOB NO	DATE ASSEMBLY CODE FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS1643	C1	NOV '02	30128	0235 Dallas	332480	Module w/Hi Densit	500	77	0
DS1643	C1	NOV '02	30128	0235 Dallas	332480	Module w/Hi Densit	1000	77	0

RELIABILITY MONITOR

STRESS: STORAGE LIFE

CONDITIONS: 150C

PRODUCT	REV	MONITOR DATE	JOB NO	DATE ASSEMBLY CODE FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS1620	D1	JUL '02	30106	0114 CPS (ChipPac, China)	DH052446AAF	SOIC	500	50	0
DS1620	D1	JUL '02	30106	0114 CPS (ChipPac, China)	DH052446AAF	SOIC	1000	50	0
DS1620	D1	JAN '03	30754	0249 Hana	DU218037AA	SOIC	500	50	0
DS1621	A7	SEP '02	30121	0232 ATP (Amkor, PI)	DK103506AA	SOIC	500	50	0
DS1621	A7	SEP '02	30121	0232 ATP (Amkor, PI)	DK103506AA	SOIC	1000	50	0

RELIABILITY MONITOR

STRESS: STORAGE LIFE

CONDITIONS: 70 C

PRODUCT	REV	MONITOR DATE	JOB NO	DATE ASSEMBLY CODE FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS1643	C1	NOV '02	30127	0235 Dallas	332480	Module w/Hi Densit	500	77	0
DS1643	C1	NOV '02	30127	0235 Dallas	332480	Module w/Hi Densit	1000	76	0
DS1990	J3-F	NOV '02	30269	0238 Fastech	332428-1	iButton F50w/IC's	500	77	0
DS1990	J3-F	NOV '02	30269	0238 Fastech	332428-1	iButton F50w/IC's	1000	77	0
DS1992	E7-F	DEC '02	30264	0238 Fastech	332811-1	iButton F50 w/Bum	500	77	0
DS1992	E7-F	DEC '02	30264	0238 Fastech	332811-1	iButton F50 w/Bum	1000	77	0

RELIABILITY MONITOR

STRESS: SOLDERABILITY

CONDITIONS: JESD22-B102

PRODUCT	REV	MONITOR DATE	JOB NO	DATE ASSEMBLY CODE FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS12887	A2-	OCT '02	30222	0227 Fastech	331525	Module w/Bent Fra	1	3	0
DS12887	A2-	JAN '03	30743	0231 Fastech	331980	Module w/Bent Fra	1	3	0
DS1643	C1	NOV '02	30125	0235 Dallas	332480	Module w/Hi Densit	5	3	0
DS1643	C1	FEB '03	31038	0305 Dallas	334458	Module w/Hi Densit	5	3	0

RELIABILITY MONITOR

STRESS: PRECONDITION U/S

CONDITIONS: J-STD-020

PRODUCT	REV	MONITOR		DATE	ASSEMBLY		LOT NO.	PACKAGE	READ		
		DATE	JOB NO		CODE	FACILITY			POINT	QTY	FAIL
DS1100	A3	OCT '01	28534	0126	ATP (Amkor, PI)	DK114601AD	SOIC	1	4	0	
DS1100	A3	JAN '02	28613	0132	ATP (Amkor, PI)	DK115002AK	SOIC	1	4	0	
DS1100	A3	JUL '02	30191	0230	OSEP	DE120202AFB	SOIC	1	4	0	
DS1232	C2-L	JUL '02	30184	0111	OSEP	DE049638ADB	SOIC	7	4	0	
DS1232	C2-L	JAN '03	30757	0252	ATP (Amkor, PI)	DK235629AB	SOIC	7	4	0	
DS1267	A1	AUG '02	30198	0237	Carsem	DM234023AF	TSSOP	2	4	0	
DS1620	D1	JUL '02	30101	0114	CPS (ChipPac, China)	DH052446AAF	SOIC	7	4	0	
DS1620	D1	JAN '03	30749	0249	Hana	DU218037AA	SOIC	7	4	0	
DS1621	A7	SEP '02	30116	0232	ATP (Amkor, PI)	DK103506AA	SOIC	7	4	0	
DS21352	A4	AUG '02	30218	0240	Stats	DC039494AA	LQFP	5	4	0	
DS2154	A2	NOV '02	30235	0230	Stats	DC102671AA	LQFP	5	4	0	
DS2502	C4	JUL '02	30109	0238	OSEP	DE252080AEB	TSOC	2	4	0	

RELIABILITY MONITOR

STRESS: PHYSICAL DIMENSIONS

CONDITIONS: JESD22-B100

PRODUCT	REV	MONITOR DATE	JOB NO	DATE ASSEMBLY CODE FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS12887	A2-	OCT '02	30223	0227 Fastech	331525	Module w/Bent Fra	1	6	0
DS12887	A2-	JAN '03	30744	0231 Fastech	331980	Module w/Bent Fra	1	6	0
DS1643	C1	NOV '02	30126	0235 Dallas	332480	Module w/Hi Densit	5	6	0
DS1643	C1	FEB '03	31039	0305 Dallas	334458	Module w/Hi Densit	5	6	0

RELIABILITY MONITOR

STRESS: MOISTURE SOAK

CONDITIONS: 60C/90% R.H.

PRODUCT	REV	MONITOR DATE	JOB NO	DATE ASSEMBLY CODE FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS1643	C1	NOV '02	30129	0235 Dallas	332480	Module w/Hi Densit	500	77	2
DS1643	C1	NOV '02	30129	0235 Dallas	332480	Module w/Hi Densit	1000	75	0
DS1990	J3-F	NOV '02	30271	0238 Fastech	332428-1	iButton F50w/IC's	500	77	0
DS1990	J3-F	NOV '02	30271	0238 Fastech	332428-1	iButton F50w/IC's	1000	77	0
DS1992	E7-F	DEC '02	30266	0238 Fastech	332811-1	iButton F50 w/Bum	500	77	0
DS1992	E7-F	DEC '02	30266	0238 Fastech	332811-1	iButton F50 w/Bum	1000	77	0

RELIABILITY MONITOR

STRESS: HAST, NO BIAS

CONDITIONS: 130C, 85% R.H.

PRODUCT	REV	MONITOR DATE	JOB NO	DATE ASSEMBLY CODE FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS21352	A4	AUG '02	30221	0240 Stats	DC039494AA	LQFP	96	72	0
DS2154	A2	NOV '02	30238	0230 Stats	DC102671AA	LQFP	200	77	0

RELIABILITY MONITOR

STRESS: HAST

CONDITIONS: 130C, 85%R.H.,5.5V

PRODUCT	REV	MONITOR DATE	JOB NO	DATE ASSEMBLY CODE FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS2401	C2	AUG '02	30205	0245 Hana	DU218017AG	TO92	96	77	0

RELIABILITY MONITOR

STRESS: CONVECTION REFLOW

CONDITIONS: 220C

PRODUCT	REV	MONITOR DATE	JOB NO	DATE ASSEMBLY CODE FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS87C520	A15-	DEC '02	30253	0232 ATP (Amkor, PI)	DK241602AA	PLCC	3	239	0

RELIABILITY MONITOR

STRESS: CONVECTION REFLOW

CONDITIONS: 235C

PRODUCT	REV	MONITOR		DATE	ASSEMBLY	LOT NO.	PACKAGE	READ		
		DATE	JOB NO					CODE	FACILITY	POINT
DS1100	A3	OCT '01	28533	0126	ATP (Amkor, PI)	DK114601AD	SOIC	3	238	0
DS1100	A3	JAN '02	28612	0132	ATP (Amkor, PI)	DK115002AK	SOIC	3	238	0
DS1100	A3	JUL '02	30190	0230	OSEP	DE120202AFB	SOIC	3	241	0
DS1232	C2-L	JUL '02	30183	0111	OSEP	DE049638ADB	SOIC	3	241	0
DS1232	C2-L	JAN '03	30756	0252	ATP (Amkor, PI)	DK235629AB	SOIC	3	241	0
DS1267	A1	AUG '02	30197	0237	Carsem	DM234023AF	TSSOP	3	241	0
DS1620	D1	JUL '02	30100	0114	CPS (ChipPac, China)	DH052446AAF	SOIC	3	244	0
DS1620	D1	JAN '03	30748	0249	Hana	DU218037AA	SOIC	3	244	0
DS1621	A7	SEP '02	30115	0232	ATP (Amkor, PI)	DK103506AA	SOIC	3	241	0
DS21352	A4	AUG '02	30217	0240	Stats	DC039494AA	LQFP	3	241	0
DS2154	A2	NOV '02	30234	0230	Stats	DC102671AA	LQFP	3	241	0
DS2502	C4	JUL '02	30108	0238	OSEP	DE252080AEB	TSOC	3	151	0

RELIABILITY MONITOR

STRESS: BIASED MOISTURE

CONDITIONS: 85/85, 5.5 VOLTS

PRODUCT	REV	MONITOR		DATE ASSEMBLY		LOT NO.	PACKAGE	READ		
		DATE	JOB NO	CODE	FACILITY			POINT	QTY	FAIL
DS1267	A1	AUG '02	30201	0237	Carsem	DM234023AF	TSSOP	500	77	0
DS12887	A2-	OCT '02	30225	0227	Fastech	331525	Module w/Bent Fra	500	100	0
DS12887	A2-	OCT '02	30225	0227	Fastech	331525	Module w/Bent Fra	1000	100	0
DS12887	A2-	JAN '03	30746	0231	Fastech	331980	Module w/Bent Fra	500	100	0
DS1302	A4	SEP '02	30180	0226	CPS (ChipPac, China)	DE244426AA	PDIP	500	77	0
DS1302	A4	SEP '02	30180	0226	CPS (ChipPac, China)	DE244426AA	PDIP	1000	77	0
DS1620	D1	JUL '02	30104	0114	CPS (ChipPac, China)	DH052446AAF	SOIC	500	70	0
DS1620	D1	JUL '02	30104	0114	CPS (ChipPac, China)	DH052446AAF	SOIC	1000	70	0
DS1620	D1	JAN '03	30752	0249	Hana	DU218037AA	SOIC	500	70	0
DS1621	A7	SEP '02	30119	0232	ATP (Amkor, PI)	DK103506AA	SOIC	500	70	0
DS1621	A7	SEP '02	30119	0232	ATP (Amkor, PI)	DK103506AA	SOIC	1000	70	0
DS80C320	C5	DEC '02	30261	0230	ATP (Amkor, PI)	DK240563AB	PDIP	500	77	0

RELIABILITY MONITOR

STRESS: AUTOCLAVE

CONDITIONS: 121C, 2 ATM STEAM, UNBIASED

PRODUCT	REV	MONITOR DATE	JOB NO	DATE CODE	ASSEMBLY FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS1100	A3	OCT '01	28538	0126	ATP (Amkor, PI)	DK114601AD	SOIC	168	40	0
DS1100	A3	JAN '02	28617	0132	ATP (Amkor, PI)	DK115002AK	SOIC	168	39	0
DS1267	A1	AUG '02	30202	0237	Carsem	DM234023AF	TSSOP	96	40	5
DS1302	A4	SEP '02	30181	0226	CPS (ChipPac, China)	DE244426AA	PDIP	168	45	0
DS2401	C2	AUG '02	30206	0245	Hana	DU218017AG	TO92	168	45	0
DS2502	C4	JUL '02	30111	0238	OSEP	DE252080AEB	TSOC	96	70	0
DS80C320	C5	DEC '02	30262	0230	ATP (Amkor, PI)	DK240563AB	PDIP	96	45	0