

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
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	JUL '02	30189	0230	OSEP	DE120202AFB	SOIC	1	4	0
DS1620	D1	JUL '02	30099	0114	CPS (ChipPac, China)	DH052446AAF	SOIC	7	4	0
DS1621	A7	SEP '02	30114	0232	ATP (Amkor, PI)	DK103506AA	SOIC	7	4	0
DS1803	A2	NOV '01	28555	0143	ATP (Amkor, PI)	DK122629AA	SOIC	1	4	0
DS1803	A2	APR '02	29503	0204	OSEP	DE113317AAB	SOIC	2	4	0
DS1803	A2	OCT '02	30226	0234	ATP (Amkor, PI)	DK236047AA	SOIC	2	4	0
DS21S07	C1-	FEB '02	28805	0112	Carsem	DM048483AC	TSSOP	5	4	0
DS2502	C4	APR '02	29355	0220	OSEP	DE218054AEC	TSOC	2	4	0
DS2502	C4	JUL '02	30107	0238	OSEP	DE252080AEB	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-	APR '02	29529	0219	Fastech	330288	Module w/Bent Fra	300	100	0
DS12887	A2-	OCT '02	30224	0227	Fastech	331525	Module w/Bent Fra	300	100	0
DS1990	J3-F	JUN '02	29484	0211	Fastech	320968-1	iButton F50w/IC's	500	77	2
DS1990	J3-F	NOV '02	30270	0238	Fastech	332428-1	iButton F50w/IC's	500	77	0
DS1992	E7-F	JUN '02	29496	0220	Fastech	321281-1	iButton F50 w/Bum	500	77	0
DS1992	E7-F	DEC '02	30265	0238	Fastech	332811-1	iButton F50 w/Bum	500	77	0
DS29020	A7-3	JUN '02	29371	0221	Dallas	DX220049AA-	Cartridge	300	75	4
DS29020	A7-3	SEP '02	30123	0238	Dallas	DX251184AAA	Cartridge	300	77	0

RELIABILITY MONITOR

STRESS: TEMP CYCLE

CONDITIONS: -55C TO 125C

PRODUCT	REV	MONITOR	JOB NO	DATE	ASSEMBLY	LOT NO.	PACKAGE	READ		
		DATE		CODE	FACILITY			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
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
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
DS1803	A2	NOV '01	28559	0143	ATP (Amkor, PI)	DK122629AA	SOIC	300	40	0
DS1803	A2	NOV '01	28559	0143	ATP (Amkor, PI)	DK122629AA	SOIC	1000	40	0
DS1803	A2	APR '02	29507	0204	OSEP	DE113317AAB	SOIC	500	40	0
DS1803	A2	APR '02	29507	0204	OSEP	DE113317AAB	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
DS21S07	C1-	FEB '02	28809	0112	Carsem	DM048483AC	TSSOP	300	45	0
DS21S07	C1-	FEB '02	28809	0112	Carsem	DM048483AC	TSSOP	1000	45	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	APR '02	29358	0220	OSEP	DE218054AEC	TSOC	300	77	0
DS2502	C4	APR '02	29358	0220	OSEP	DE218054AEC	TSOC	1000	74	0
DS2502	C4	JUL '02	30110	0238	OSEP	DE252080AEB	TSOC	500	77	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
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: 0C TO 70C

PRODUCT	REV	MONITOR DATE	JOB NO	DATE CODE	ASSEMBLY 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
DS1621	A7	SEP '02	30121	0232 ATP (Amkor, PI)	DK103506AA	SOIC	500	50	0

RELIABILITY MONITOR

STRESS: STORAGE LIFE

CONDITIONS: 70 C

PRODUCT	REV	MONITOR DATE	JOB NO	DATE CODE	ASSEMBLY 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	JUN '02	29483	0211	Fastech	320968-1	iButton F50w/IC's	500	77	0
DS1990	J3-F	JUN '02	29483	0211	Fastech	320968-1	iButton F50w/IC's	1000	77	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	JUN '02	29495	0220	Fastech	321281-1	iButton F50 w/Bum	500	77	0
DS1992	E7-F	JUN '02	29495	0220	Fastech	321281-1	iButton F50 w/Bum	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: STORAGE LIFE

CONDITIONS: 85 C

PRODUCT	REV	MONITOR DATE	JOB NO	DATE ASSEMBLY CODE FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS29020	A7-3	JUN '02	29370	0221 Dallas	DX220049AA-	Cartridge	336	75	1
DS29020	A7-3	SEP '02	30122	0238 Dallas	DX251184AAA	Cartridge	336	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-	APR '02	29527	0219 Fastech	330288	Module w/Bent Fra	1	3	0
DS12887	A2-	OCT '02	30222	0227 Fastech	331525	Module w/Bent Fra	1	3	0
DS1643	C1	NOV '02	30125	0235 Dallas	332480	Module w/Hi Densit	5	3	0

RELIABILITY MONITOR

STRESS: PRECONDITION U/S

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	28534	0126	ATP (Amkor, PI)	DK114601AD	SOIC	1	4	0
DS1100	A3	JUL '02	30191	0230	OSEP	DE120202AFB	SOIC	1	4	0
DS1620	D1	JUL '02	30101	0114	CPS (ChipPac, China)	DH052446AAF	SOIC	7	4	0
DS1621	A7	SEP '02	30116	0232	ATP (Amkor, PI)	DK103506AA	SOIC	7	4	0
DS1803	A2	NOV '01	28557	0143	ATP (Amkor, PI)	DK122629AA	SOIC	2	4	0
DS1803	A2	APR '02	29505	0204	OSEP	DE113317AAB	SOIC	2	4	0
DS21S07	C1-	FEB '02	28807	0112	Carsem	DM048483AC	TSSOP	7	4	0
DS2502	C4	APR '02	29357	0220	OSEP	DE218054AEC	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-	APR '02	29528	0219 Fastech	330288	Module w/Bent Fra	1	6	0
DS12887	A2-	OCT '02	30223	0227 Fastech	331525	Module w/Bent Fra	1	6	0
DS1643	C1	NOV '02	30126	0235 Dallas	332480	Module w/Hi Densit	5	6	0

RELIABILITY MONITOR

STRESS: MOISTURE SOAK

CONDITIONS: 60C/90% R.H.

PRODUCT	REV	MONITOR DATE	JOB NO	DATE CODE	ASSEMBLY 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
DS1646	B2	APR '01	26888	0101	Fastech	300822	Module w/Hi Densit	288	56	0
DS1646	B2	APR '01	26888	0101	Fastech	300822	Module w/Hi Densit	576	56	0
DS1990	J3-F	JUN '02	29485	0211	Fastech	320968-1	iButton F50w/IC's	500	76	0
DS1990	J3-F	JUN '02	29485	0211	Fastech	320968-1	iButton F50w/IC's	1000	76	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	JUN '02	29497	0220	Fastech	321281-1	iButton F50 w/Bum	500	77	0
DS1992	E7-F	JUN '02	29497	0220	Fastech	321281-1	iButton F50 w/Bum	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: MOISTURE SOAK

CONDITIONS: 85 C/85% R.H.

PRODUCT	REV	MONITOR DATE	JOB NO	DATE ASSEMBLY CODE FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS29020	A7-3	JUN '02	29372	0221 Dallas	DX220049AA-	Cartridge	274	75	2
DS29020	A7-3	SEP '02	30124	0238 Dallas	DX251184AAA	Cartridge	274	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	JOB NO	DATE CODE	ASSEMBLY FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS1100	A3	OCT '01	28533	0126	ATP (Amkor, PI)	DK114601AD	SOIC	3	238	0
DS1100	A3	JUL '02	30190	0230	OSEP	DE120202AFB	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
DS1621	A7	SEP '02	30115	0232	ATP (Amkor, PI)	DK103506AA	SOIC	3	241	0
DS1803	A2	NOV '01	28556	0143	ATP (Amkor, PI)	DK122629AA	SOIC	3	241	0
DS1803	A2	APR '02	29504	0204	OSEP	DE113317AAB	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
DS21S07	C1-	FEB '02	28806	0112	Carsem	DM048483AC	TSSOP	3	243	0
DS2502	C4	APR '02	29356	0220	OSEP	DE218054AEC	TSOC	3	151	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	JOB NO	DATE ASSEMBLY CODE	ASSEMBLY FACILITY	LOT NO.	PACKAGE	READ POINT	QTY	FAIL
DS12887	A2-	APR '02	29530	0219	Fastech	330288	Module w/Bent Fra	274	100	0
DS12887	A2-	APR '02	29530	0219	Fastech	330288	Module w/Bent Fra	959	100	0
DS12887	A2-	OCT '02	30225	0227	Fastech	331525	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
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
DS1803	A2	NOV '01	28560	0143	ATP (Amkor, PI)	DK122629AA	SOIC	274	77	0
DS1803	A2	NOV '01	28560	0143	ATP (Amkor, PI)	DK122629AA	SOIC	959	77	0
DS1803	A2	APR '02	29508	0204	OSEP	DE113317AAB	SOIC	500	77	0
DS1803	A2	APR '02	29508	0204	OSEP	DE113317AAB	SOIC	1000	76	0
DS21S07	C1-	FEB '02	28810	0112	Carsem	DM048483AC	TSSOP	274	77	0
DS21S07	C1-	FEB '02	28810	0112	Carsem	DM048483AC	TSSOP	959	77	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
DS1302	A4	SEP '02	30181	0226	CPS (ChipPac, China)	DE244426AA	PDIP	168	45	0
DS1803	A2	NOV '01	28561	0143	ATP (Amkor, PI)	DK122629AA	SOIC	168	37	0
DS1803	A2	APR '02	29509	0204	OSEP	DE113317AAB	SOIC	168	39	0
DS21S07	C1-	FEB '02	28811	0112	Carsem	DM048483AC	TSSOP	168	34	0
DS2401	C2	AUG '02	30206	0245	Hana	DU218017AG	TO92	168	45	0
DS2502	C4	APR '02	29359	0220	OSEP	DE218054AEC	TSOC	96	69	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