RELIABILITY MONITOR

DS1000M-100 OCT '99 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1000	E3	9944	DH927108AJC	8	PDIP	300	CPS (ChipPac, China

PROCESS Single Poly, Single Metal 1.2 µm Standard Process

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

Cf: 60% Tuse: 55 °C
Ea: 0.7 Vuse: 5.5 Volts
β: 1

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
24791	INFANT LIFE	125C, 7.0 VOLTS		234	48	HOUR	1
24792	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS		77	336	HOUR	0
		125C, 7.0 VOLTS		75	1000	HOUR	0
		TOTAL:	FAIL RATE (Fits):	67	DEVICE HRS:	3.01E+07	1
24793	TEMP CYCLE	-55C TO 125C		40	300	CYCL	0
				40	1000	CYCL	0
		TOTAL:					0
24794	BIASED MOISTURE	85/85, 5.5 VOLTS		77	274	HOUR	0
				77	959	HOUR	0
		TOTAL:					0
24795	AUTOCLAVE	121C STEAM, UNBIASED		37	96	HOUR	0
		TOTAL:					0

JOB NO	FAILURE MODE	FAILURE MECHANISM	CORRECTIVE ACTION
24791	AC	VERIFIED	NONE

PROJECT NO: 13992

RELIABILITY MONITOR

DS1000M-100 APR '00 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1000	E3	0009	DH949661AEA	8	PDIP	300	CPS (ChipPac, China

PROCESS Single Poly, Single Metal 1.2 µm Standard Process

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

Cf: 60%
Ea: 0.7
β: 1
Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25406	INFANT LIFE	125C, 7.0 VOLTS		234	48	HOUR	0
25407	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS		77	336	HOUR	0
		125C, 7.0 VOLTS		77	1000	HOUR	0
		TOTAL:	FAIL RATE (Fits):	30	DEVICE HRS:	3.08E+07	0
25408	TEMP CYCLE	-55C TO 125C		40	300	CYCL	0
				40	1000	CYCL	0
		TOTAL:					0
25409	BIASED MOISTURE	85/85, 5.5 VOLTS		77	274	HOUR	0
				77	959	HOUR	0
		TOTAL:					0
25410	AUTOCLAVE	121C STEAM, UNBIASED		40	96	HOUR	0
		TOTAL:					0

PROJECT NO: 15225

RELIABILITY MONITOR

DS1232L APR '00 Monitor

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1232	C2-L	0011	DE952427AAD	8	SOIC	150	OSEP

PROCESS Single Poly, Single Metal 0.8 µm Standard Process

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

Cf: 60%
Ea: 0.7
β: 1
Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25421	INFANT LIFE	125C, 7.0 VOLTS		233	48	HOUR	0
		TOTAL:	FAIL RATE (Fits):	235	DEVICE HRS:	3.91E+06	0
25418	ULTRASOUND	J-STD-020		4			0
		TOTAL:					0
25419	STORAGE LIFE	125C		238	24	HOUR	
	MOISTURE SOAK	85C/85% R.H.		238	168	HOUR	
	CONVECTION REFLOW	235C		238	3	PASS	1
		TOTAL:					1

JOB NO	FAILURE MODE	FAILURE MECHANISM	CORRECTIVE ACTION
25419	IOL RST	IN PROCESS	NA

PROJECT NO: 14006

RELIABILITY MONITOR

DS1232L JUL '00 Monitor

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1232	C2-L	0024	DE014522ADB	8	SOIC	150	OSEP

PROCESS Single Poly, Single Metal 0.8 µm Standard Process

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

Cf: 60%
Ea: 0.7
β: 1
Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25787	INFANT LIFE	125C, 7.0 VOLTS		234	48	HOUR	1
		TOTAL:	FAIL RATE (Fits):	518	DEVICE HRS:	3.91E+06	1
25785	STORAGE LIFE	125C		238	24	HOUR	
	MOISTURE SOAK	85C/85% R.H.		238	168	HOUR	
	CONVECTION REFLOW	235C		238	3	PASS	0
		TOTAL:					0

JOB NO	FAILURE MODE	FAILURE MECHANISM	CORRECTIVE ACTION
25787	OPEN	IN PROCESS	NA

PROJECT NO: 16198

RELIABILITY MONITOR

DS1233Z-10 JAN '00 Monitor

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1233	A5	9952	DM929359ABA	3	SOT223	140	Carsem

PROCESS Single Poly, Single Metal 1.2 µm Zero tempco poly

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

Cf: 60% Tuse: 55 °C
Ea: 0.7 Vuse: 5.5 Volts
β: 1

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
25036	INFANT LIFE	125C, 7.0 VOLTS	229	48	HOUR	0
25037	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS	77	336	HOUR	0
		125C, 7.0 VOLTS	77	1000	HOUR	0
		TOTAL: FAIL RATE (Fits):	30	DEVICE HRS:	3.07E+07	0
25033	ULTRASOUND	J-STD-020	4			0
		TOTAL:				0
25034	STORAGE LIFE	125C	233	24	HOUR	
	MOISTURE SOAK	85C/85% R.H.	233	168	HOUR	
	CONVECTION REFLOW	235C	233	3	PASS	0
		TOTAL:				0
25035	PRECONDITION U/S	J-STD-020	4			0
		TOTAL:				0
25038	TEMP CYCLE	-55C TO 125C	40	700	CYCL	0
			40	1000	CYCL	0
		TOTAL:				0
25039	HAST	130C, 85%R.H.,5.5V	72	100	HOUR	0
		TOTAL:				0
25040	AUTOCLAVE	121C STEAM, UNBIASED	40	96	HOUR	0
		TOTAL:				0

PROJECT NO: 14002

RELIABILITY MONITOR

DS1233Z-10 JAN '00 Monitor

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1233	A5	9952	DM929359ABA	3	SOT223	140	Carsem

PROCESS Single Poly, Single Metal 1.2 µm Zero tempco poly

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

Cf: 60%
Ea: 0.7
β: 1

Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS

PROJECT NO: 14002

RELIABILITY MONITOR

DS1267-10 AUG '99 MONITOR - ANAM,PI

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1267	A1	9823	DK807766AAE-	20	TSSOP	173	ATP (Anam, PI)

PROCESS Single Poly, Single Metal 1.2 µm Implanted Poly 1

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

Cf: 60%
Ea: 0.7
β: 1
Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
24343	INFANT LIFE	125C, 6.0 V, -4.0V		228	48	HOUR	0
24344	HIGH VOLTAGE LIFE	125C, 6.0 V, -4.0V		77	336	HOUR	0
		125C, 6.0 V, -4.0V		75	1000	HOUR	0
		TOTAL:	FAIL RATE (Fits):	83	DEVICE HRS:	1.10E+07	0
24340	ULTRASOUND	J-STD-020		4			0
		TOTAL:					0
24341	STORAGE LIFE	125C		238	24	HOUR	
	MOISTURE SOAK	85C/85% R.H.		238	168	HOUR	
	CONVECTION REFLOW	235C		238	3	PASS	0
		TOTAL:					0
24342	PRECONDITION U/S	J-STD-020		4			0
		TOTAL:					0
24345	TEMP CYCLE	-55C TO 125C		40	300	CYCL	0
				40	1000	CYCL	0
		TOTAL:					0
24346	BIASED MOISTURE	85/85, 5.5 VOLTS		77	274	HOUR	0
				77	959	HOUR	0
		TOTAL:					0
24347	AUTOCLAVE	121C STEAM, UNBIASED		34	96	HOUR	0

PROJECT NO: 13798

RELIABILITY MONITOR

DS1267-10 AUG '99 MONITOR - ANAM,PI

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1267	A1	9823	DK807766AAE-	20	TSSOP	173	ATP (Anam, PI)

PROCESS Single Poly, Single Metal 1.2 µm Implanted Poly 1

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

Cf: 60%
Ea: 0.7
β: 1

Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
		TOTAL:				0

PROJECT NO: 13798

RELIABILITY MONITOR

DS1267-10 FEB '00 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1267	A2	9930	DK904472ADF	20	TSSOP	173	ATP (Anam, PI)

PROCESS Single Poly, Single Metal 1.2 µm Implanted Poly 1

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

Cf: 60%
Ea: 0.7
β: 1

Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25175	INFANT LIFE	125C, 6.0 V, -4.0V		226	48	HOUR	0
25176	HIGH VOLTAGE LIFE	125C, 6.0 V, -4.0V		77	336	HOUR	
		TOTAL:	FAIL RATE (Fits):	657	DEVICE HRS:	1.39E+06	0
25172	ULTRASOUND	J-STD-020		4			0
		TOTAL:					0
25173	STORAGE LIFE	125C		238	24	HOUR	
	MOISTURE SOAK	85C/85% R.H.		238	168	HOUR	
	CONVECTION REFLOW	235C		238	3	PASS	0
		TOTAL:					0
25174	PRECONDITION U/S	J-STD-020		4			0
		TOTAL:					0

PROJECT NO: 14260

RELIABILITY MONITOR

DS1302 JUN '99 MONITOR-ANAM,PI

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1302	A3	9905	DK824165AAA	8	PDIP	300	ATP (Anam, PI)

PROCESS Single Poly, Double Metal 0.8 µm Standard Process

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

Cf: 60%
Ea: 0.7
β: 1
Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
23938	INFANT LIFE	125C, 6.0 VOLTS		234	48	HOUR	0
24513	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS		77	336	HOUR	0
		125C, 6.0 VOLTS		75	1000	HOUR	0
		TOTAL:	FAIL RATE (Fits):	83	DEVICE HRS: 1.11E+07		0
24514	TEMP CYCLE	-55C TO 125C		40	300	CYCL	0
				40	1000	CYCL	1
		TOTAL:					1
24515	BIASED MOISTURE	85/85, 5.5 VOLTS		77	274	HOUR	0
				75	959	HOUR	0
		TOTAL:					0

JOB NO	FAILURE MODE	FAILURE MECHANISM	CORRECTIVE ACTION
24514	TRICKLE CHARGE	VERIFIED - NO ANALYSIS	NONE

PROJECT NO: 13449

RELIABILITY MONITOR

DS1302 MAR '00 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1302	A3	0006	DH945115AAB	8	PDIP	300	CPS (ChipPac, China

PROCESS Single Poly, Double Metal 0.8 µm Standard Process

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

Cf: 60% Tuse: 55 °C
Ea: 0.7 Vuse: 5.5 Volts
β: 1

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25211	INFANT LIFE	125C, 6.0 VOLTS		234	48	HOUR	1
25212	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS		77	336	HOUR	0
		125C, 6.0 VOLTS		76	1000	HOUR	0
		TOTAL:	FAIL RATE (Fits):	181	DEVICE HRS:	1.12E+07	1
25213	TEMP CYCLE	-55C TO 125C		40	300	CYCL	0
				40	1000	CYCL	0
		TOTAL:					0
25214	BIASED MOISTURE	85/85, 5.5 VOLTS		77	274	HOUR	0
				77	959	HOUR	1
		TOTAL:					1
25215	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED		39	96	HOUR	0
		TOTAL:					0

JOB NO	FAILURE MODE	FAILURE MECHANISM	CORRECTIVE ACTION
25211	ICC STANDBY	PROBABLE GATE OXIDE	SEVERAL EVALUATIONS ARE IN PROCESS TO IMPROVE GATE OXIDE PERFORMANCE
25214	TC_CURRENT	IN PROCESS	NA

PROJECT NO: 14276

RELIABILITY MONITOR

DS1302 JUN '00 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1302	A3	0018	DH008331AAA	8	PDIP	300	CPS (ChipPac, China

PROCESS Single Poly, Double Metal 0.8 µm Standard Process

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

Cf: 60% Tuse: 55 °C
Ea: 0.7 Vuse: 5.5 Volts
β: 1

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25535	INFANT LIFE	125C, 6.0 VOLTS		234	48	HOUR	0
25536	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS		77	336	HOUR	0
		TOTAL:	FAIL RATE (Fits):	192	DEVICE HRS:	4.77E+06	0
25537	TEMP CYCLE	-55C TO 125C		40	300	CYCL	0
		TOTAL:					0
25538	BIASED MOISTURE	85/85, 5.5 VOLTS		77	274	HOUR	0
				77	959	HOUR	1
		TOTAL:					1
25539	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED		40	96	HOUR	0
		TOTAL:					0

JOB NO	FAILURE MODE	FAILURE MECHANISM	CORRECTIVE ACTION
25538	ICC ACTIVE	IN PROCESS	NA

PROJECT NO: 14277

RELIABILITY MONITOR

DS1302 AUG '00 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1302	A3	0032	DH020619AAA	8	PDIP	300	CPS (ChipPac, China

PROCESS Single Poly, Double Metal 0.8 µm Standard Process

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

Cf: 60%
Ea: 0.7
β: 1

Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25931	INFANT LIFE	125C, 6.0 VOLTS		234	48	HOUR	0
		TOTAL:	FAIL RATE (Fits):	640	DEVICE HRS:	1.43E+06	0

PROJECT NO: 16360

RELIABILITY MONITOR

DS1621 MAR '00 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS1621	A7	9950	DE940040AAC	8	SOIC	150	OSEP

PROCESS Single Poly, Single Metal 0.8 µm E2PROM process

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

Cf: 60%
Ea: 0.7
β: 1
Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25220	INFANT LIFE	125C, 7.0 VOLTS		237	48	HOUR	0
		TOTAL:	FAIL RATE (Fits):	231	DEVICE HRS:	3.97E+06	0
25217	ULTRASOUND	J-STD-020		4			0
		TOTAL:					0
25218	STORAGE LIFE	125C		241	24	HOUR	
	MOISTURE SOAK	85C/85% R.H.		241	168	HOUR	
	CONVECTION REFLOW	235C		241	3	PASS	0
		TOTAL:					0
25219	PRECONDITION U/S	J-STD-020		4			0
		TOTAL:					0

PROJECT NO: 13948

RELIABILITY MONITOR

DS2108 FEB '00 MONITOR, D.P.

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2108	B7	9951	DK940069AAC	24	SOIC	300	ATP (Anam, PI)

PROCESS Single Poly, Single Metal 5.0 µm Negative zero tempco poly

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

Cf: 60%
Ea: 0.7
β: 1

Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
25106	INFANT LIFE	125C, 6.0 VOLTS	234	48	HOUR	0
25107	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS	77	336	HOUR	0
		125C, 6.0 VOLTS	76	1000	HOUR	0
		TOTAL: FAIL RATE (Fits):	82	DEVICE HRS:	1.12E+07	0

JOB NO	FAILURE MODE	FAILURE MECHANISM	CORRECTIVE ACTION
25106	RESISTANCE	LEAKAGE HI ON PIN 5	NO FURTHER ACTION

PROJECT NO: 14170

RELIABILITY MONITOR

DS2108 MAY '00 MONITOR, D.P.

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2108	B7	0019	DK007198AAF	24	SOIC	300	ATP (Anam, PI)

PROCESS Single Poly, Single Metal 5.0 µm Negative zero tempco poly

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

Cf: 60% Tuse: 55 °C
Ea: 0.7 Vuse: 5.5 Volts
β: 1

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25525	INFANT LIFE	125C, 6.0 VOLTS		231	48	HOUR	0
25526	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS		77	336	HOUR	0
		125C, 6.0 VOLTS		77	1000	HOUR	0
		TOTAL:	FAIL RATE (Fits):	82	DEVICE HRS:	1.12E+07	0
25522	ULTRASOUND	J-STD-020		4			0
		TOTAL:					0
25523	STORAGE LIFE	125C		238	24	HOUR	
	MOISTURE SOAK	30C/60% R.H.		238	144	HOUR	
	CONVECTION REFLOW	235C		238	3	PASS	3
		TOTAL:					3
25524	PRECONDITION U/S	J-STD-020		4			0
		TOTAL:					0
25527	TEMP CYCLE	-55C TO 125C		40	300	CYCL	0
				40	1000	CYCL	0
		TOTAL:					0
25528	BIASED MOISTURE	85/85, 5.5 VOLTS		77	274	HOUR	1
		TOTAL:					1
25529	AUTOCLAVE	121C STEAM, UNBIASED		37	96	HOUR	0
		TOTAL:					0

PROJECT NO: 14171

RELIABILITY MONITOR

DS2108 MAY '00 MONITOR, D.P.

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2108	B7	0019	DK007198AAF	24	SOIC	300	ATP (Anam, PI)

PROCESS Single Poly, Single Metal 5.0 µm Negative zero tempco poly

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

Cf: 60%
Ea: 0.7
β: 1

Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS

JOB NO	FAILURE MODE	FAILURE MECHANISM	CORRECTIVE ACTION
25523	R BOT 1	IN PROCESS	NA
25528	R BOT 3	IN PROCESS	NA

PROJECT NO: 14171

RELIABILITY MONITOR

DS2108 AUG '00 MONITOR, D.P.

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2108	B7	0029	DK016058AAG	24	SOIC	300	ATP (Anam, PI)

PROCESS Single Poly, Single Metal 5.0 µm Negative zero tempco poly

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

Cf: 60%
Ea: 0.7
β: 1

Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25857	INFANT LIFE	125C, 6.0 VOLTS		231	48	HOUR	0
		TOTAL:	FAIL RATE (Fits):	654	DEVICE HRS:	1.40E+06	0
25855	STORAGE LIFE	125C		238	24	HOUR	
	MOISTURE SOAK	30C/60% R.H.		238	144	HOUR	
	CONVECTION REFLOW	235C		238	3	PASS	0
		TOTAL:					0

PROJECT NO: 16238

RELIABILITY MONITOR

DS2109 DEC '99 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2109	A7	9842	DM812689AAA	28	SOIC	300	Carsem

PROCESS Single Poly, Single Metal 0.8 µm Negative zero tempco poly

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

Cf: 60% Tuse: 55 °C
Ea: 0.7 Vuse: 5.5 Volts
β: 1

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
24808	INFANT LIFE	125C, 7.0 VOLTS		232	48	HOUR	2
24809	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS		77	336	HOUR	0
		125C, 7.0 VOLTS		77	1000	HOUR	0
		TOTAL:	FAIL RATE (Fits):	101	DEVICE HRS:	3.08E+07	2
24805	ULTRASOUND	J-STD-020		4			0
		TOTAL:					0
24806	STORAGE LIFE	125C		237	24	HOUR	
	MOISTURE SOAK	85C/85% R.H.		237	168	HOUR	
	CONVECTION REFLOW	235C		237	3	PASS	0
		TOTAL:					0
24807	PRECONDITION U/S	J-STD-020		4			1
		TOTAL:					1
24810	TEMP CYCLE	-55C TO 125C		50	300	CYCL	0
				50	1000	CYCL	0
		TOTAL:					0
24811	HAST	130C, 85%R.H.,5.5V		66	100	HOUR	0
		TOTAL:					0
24812	AUTOCLAVE	121C STEAM, UNBIASED		38	96	HOUR	0
		TOTAL:					0

PROJECT NO: 14173

RELIABILITY MONITOR

DS2109 DEC '99 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2109	A7	9842	DM812689AAA	28	SOIC	300	Carsem

PROCESS Single Poly, Single Metal 0.8 µm Negative zero tempco poly

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

Cf: 60%
Ea: 0.7
β: 1

Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS

JOB NO	FAILURE MODE	FAILURE MECHANISM	CORRECTIVE ACTION
24807	DIE DELAMINATION	ONE SAMPLE W/100% DIE DELAM/ELECTRICALLY GOOD	NONE, 237 PRODUCTS WERE PRECONDITIONED TO LEVEL ONE W/NO FAILURES. SUBSEQUENT STRESSING IN PROCESS.
24808	TERM RESISTANCE	GATE OXIDE	SEVERAL EVALUATIONS ARE IN PROCESS TO IMPROVE GATE OXIDE PERFORMANCE

PROJECT NO: 14173

RELIABILITY MONITOR

DS2118M MAR '00 MONITOR, D.P. Anam,K.

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2118M	B1	0005	ZN946350AAG	36	SSOP	300	ATK (Anam, K)

PROCESS Single Poly, Single Metal 0.6 µm Negative zero tempco poly

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

Cf: 60% Tuse: 55 °C
Ea: 0.7 Vuse: 5.5 Volts
β: 1

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25233	INFANT LIFE	125C, 6.0 VOLTS		234	48	HOUR	0
25234	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS		75	336	HOUR	0
		125C, 6.0 VOLTS		74	1000	HOUR	0
		TOTAL:	FAIL RATE (Fits):	84	DEVICE HRS:	1.08E+07	0
25230	ULTRASOUND	J-STD-020		4			0
		TOTAL:					0
25231	STORAGE LIFE	125C		238	24	HOUR	
	MOISTURE SOAK	30C/60% R.H.		238	240	HOUR	
	CONVECTION REFLOW	235C		238	3	PASS	0
		TOTAL:					0
25232	PRECONDITION U/S	J-STD-020		4			0
		TOTAL:					0
25235	TEMP CYCLE	-55C TO 125C		35	300	CYCL	0
				35	1000	CYCL	0
		TOTAL:					0
25237	AUTOCLAVE	121C STEAM, UNBIASED		32	96	HOUR	0
		TOTAL:					0

PROJECT NO: 13952

RELIABILITY MONITOR

DS2118M JUN '00 MONITOR, D.P.

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2118M	B1	0020	DN009554AAD	36	SSOP	300	ATK (Anam, K)

PROCESS Single Poly, Single Metal 0.6 µm Negative zero tempco poly

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

Cf: 60% Tuse: 55 °C
Ea: 0.7 Vuse: 5.5 Volts
β: 1

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25555	INFANT LIFE	125C, 6.0 VOLTS		234	48	HOUR	0
25556	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS		77	336	HOUR	0
		125C, 6.0 VOLTS		77	1000	HOUR	0
		TOTAL:	FAIL RATE (Fits):	81	DEVICE HRS:	1.13E+07	0
25552	ULTRASOUND	J-STD-020		4			0
		TOTAL:					0
25553	STORAGE LIFE	125C		238	24	HOUR	
	MOISTURE SOAK	30C/60% R.H.		238	240	HOUR	
	CONVECTION REFLOW	235C		238	3	PASS	0
		TOTAL:					0
25554	PRECONDITION U/S	J-STD-020		4			0
		TOTAL:					0
25557	TEMP CYCLE	-55C TO 125C		40	300	CYCL	0
				40	1000	CYCL	0
		TOTAL:					0
25559	AUTOCLAVE	121C STEAM, UNBIASED		37	96	HOUR	0
		TOTAL:					0

PROJECT NO: 13954

RELIABILITY MONITOR

DS2154 MAR '00 MONITOR, D.P.

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2154	A2	0007	DK948587AAA	100	LQFP	14x14x	ATP (Anam, PI)

PROCESS Double Poly, Double Met 0.8 µm Capacitor

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

Cf: 60% Tuse: 55 °C
Ea: 0.7 Vuse: 5.5 Volts
β: 1

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25241	INFANT LIFE	125C, 7.0 VOLTS		234	48	HOUR	1
25242	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS		90	336	HOUR	0
		125C, 7.0 VOLTS		90	1000	HOUR	0
		TOTAL:	FAIL RATE (Fits):	57	DEVICE HRS:	3.53E+07	1
25238	ULTRASOUND	J-STD-020		4			0
		TOTAL:					0
25239	STORAGE LIFE	125C		238	24	HOUR	
	MOISTURE SOAK	30C/60% R.H.		238	240	HOUR	
	CONVECTION REFLOW	235C		238	3	PASS	0
		TOTAL:					0
25240	PRECONDITION U/S	J-STD-020		4			0
		TOTAL:					0
25243	TEMP CYCLE	-55C TO 125C		66	300	CYCL	0
				66	1000	CYCL	1
		TOTAL:					1
25244	HAST, NO BIAS	130C, 85% R.H.		77	200	HOUR	0
		TOTAL:					0

JOB NO	FAILURE MODE	FAILURE MECHANISM	CORRECTIVE ACTION
25241	R CHAN 1V	IN PROCESS	NA

PROJECT NO: 13964

RELIABILITY MONITOR

DS2154 MAR '00 MONITOR, D.P.

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2154	A2	0007	DK948587AAA	100	LQFP	14x14x	ATP (Anam, PI)

PROCESS Double Poly, Double Met 0.8 µm Capacitor

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

Cf: 60%
Ea: 0.7
β: 1

Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
25241	RCHAN 1V	IN PROCESS	NA			
25243	IOLZP	IN PROCESS	NA			

PROJECT NO: 13964

RELIABILITY MONITOR

DS2154 JUN '00 MONITOR, D.P.

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2154	A2	0022	DN012234ABA	100	LQFP	14x14x	ATK (Anam, K)

PROCESS Double Poly, Double Met 0.8 µm Capacitor

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

Cf: 60% Tuse: 55 °C
Ea: 0.7 Vuse: 5.5 Volts
β: 1

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
25620	INFANT LIFE	125C, 7.0 VOLTS	233	48	HOUR	0
25621	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS	75	336	HOUR	0
		125C, 7.0 VOLTS	74	1000	HOUR	0
		TOTAL: FAIL RATE (Fits):	31	DEVICE HRS: 2.98E+07		0
25617	ULTRASOUND	J-STD-020	4			0
		TOTAL:				0
25618	STORAGE LIFE	125C	238	24	HOUR	
	MOISTURE SOAK	30C/60% R.H.	238	240	HOUR	
	CONVECTION REFLOW	235C	238	3	PASS	1
		TOTAL:				1
25619	PRECONDITION U/S	J-STD-020	4			0
		TOTAL:				0
25622	TEMP CYCLE	-55C TO 125C	73	300	CYCL	0
			73	1000	CYCL	1
		TOTAL:				1
25623	HAST, NO BIAS	130C, 85%R.H.,5.5V	73	100	HOUR	3
		TOTAL:				3

JOB NO	FAILURE MODE	FAILURE MECHANISM	CORRECTIVE ACTION
25618	LIAISB 1V	IN PROCESS	NA

PROJECT NO: 15200

RELIABILITY MONITOR

DS2154 JUN '00 MONITOR, D.P.

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2154	A2	0022	DN012234ABA	100	LQFP	14x14x	ATK (Anam, K)

PROCESS Double Poly, Double Met 0.8 µm Capacitor

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

Cf: 60%
Ea: 0.7
β: 1

Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
25622	LIAIS 1V	IN PROCESS	NA			

PROJECT NO: 15200

RELIABILITY MONITOR

DS21Q43A JUN '00 MONITOR, D.P.

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS21Q43	A3-A	0014	DN004571AAB	128	LQFP	14x14x	ATK (Anam, K)

PROCESS Single Poly, Single Metal 0.6 µm Standard Process

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

Cf: 60%
Ea: 0.7
β: 1

Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25504	INFANT LIFE	125C, 6.0 VOLTS		224	48	HOUR	0
25505	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS		77	336	HOUR	
		TOTAL:	FAIL RATE (Fits):	666	DEVICE HRS:	1.38E+06	0
25501	ULTRASOUND	J-STD-020		4			0
		TOTAL:					0
25502	STORAGE LIFE	125C		239	24	HOUR	
	MOISTURE SOAK	30C/60% R.H.		239	240	HOUR	
	CONVECTION REFLOW	235C		239	3	PASS	0
		TOTAL:					0
25503	PRECONDITION U/S	J-STD-020		4			0
		TOTAL:					0

PROJECT NO: 14281

RELIABILITY MONITOR

DS21S07 FEB '00 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS21S07	C1-A	9937	DK926747AAP	20	TSSOP	173	ATP (Anam, PI)

PROCESS Single Poly, Single Metal 0.8 µm Negative zero tempco poly

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

Cf: 60% Tuse: 55 °C
Ea: 0.7 Vuse: 5.5 Volts
β: 1

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
25098	INFANT LIFE	125C, 7.0 VOLTS	234	48	HOUR	0
25099	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS	77	336	HOUR	0
		125C, 7.0 VOLTS	76	1000	HOUR	0
		TOTAL: FAIL RATE (Fits):	30	DEVICE HRS:	3.04E+07	0
25095	ULTRASOUND	J-STD-020	4			0
		TOTAL:				0
25096	STORAGE LIFE	125C	238	24	HOUR	
	MOISTURE SOAK	85C/85% R.H.	238	168	HOUR	
	CONVECTION REFLOW	235C	238	3	PASS	0
		TOTAL:				0
25097	PRECONDITION U/S	J-STD-020	4			0
		TOTAL:				0
25100	TEMP CYCLE	-55C TO 125C	38	300	CYCL	0
			38	1000	CYCL	0
		TOTAL:				0
25101	BIASED MOISTURE	85/85, 5.5 VOLTS	76	274	HOUR	0
			76	959	HOUR	0
		TOTAL:				0
25102	AUTOCLAVE	121C STEAM, UNBIASED	38	96	HOUR	0

PROJECT NO: 14263

RELIABILITY MONITOR

DS21S07 FEB '00 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS21S07	C1-A	9937	DK926747AAP	20	TSSOP	173	ATP (Anam, PI)

PROCESS Single Poly, Single Metal 0.8 µm Negative zero tempco poly

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

Cf: 60%
Ea: 0.7
β: 1

Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
		TOTAL:				0

PROJECT NO: 14263

RELIABILITY MONITOR

DS21S07 MAY '00 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS21S07	C1-A	0013	DM002285AAF	20	TSSOP	173	Carsem S

PROCESS Single Poly, Single Metal 0.8 µm Negative zero tempco poly

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

Cf: 60% Tuse: 55 °C
Ea: 0.7 Vuse: 5.5 Volts
β: 1

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25446	INFANT LIFE	125C, 7.0 VOLTS		234	48	HOUR	0
25447	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS		77	336	HOUR	0
		125C, 7.0 VOLTS		77	1000	HOUR	
		TOTAL:	FAIL RATE (Fits):	71	DEVICE HRS:	1.30E+07	0
25443	ULTRASOUND	J-STD-020		4			0
		TOTAL:					0
25444	STORAGE LIFE	125C		238	24	HOUR	
	MOISTURE SOAK	85C/85% R.H.		238	168	HOUR	
	CONVECTION REFLOW	235C		238	3	PASS	0
		TOTAL:					0
25445	PRECONDITION U/S	J-STD-020		4			0
		TOTAL:					0
25448	TEMP CYCLE	-55C TO 125C		40	300	CYCL	0
		TOTAL:					0
25449	BIASED MOISTURE	85/85, 5.5 VOLTS		77	274	HOUR	0
		TOTAL:					0
25450	AUTOCLAVE	121C STEAM, UNBIASED		40	96	HOUR	0
		TOTAL:					0

PROJECT NO: 14264

RELIABILITY MONITOR

DS2401 JUN '00 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2401	C2	0022	DA952309AKA	3	TO92	150	Fastech

PROCESS Single Poly, Single Metal 0.6 µm Standard Process

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

Cf: 60%
Ea: 0.7
β: 1
Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25560	INFANT LIFE	125C, 6.0 VOLTS		234	48	HOUR	0
25561	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS		77	336	HOUR	0
		125C, 6.0 VOLTS		77	1000	HOUR	0
		TOTAL:	FAIL RATE (Fits):	81	DEVICE HRS:	1.13E+07	0
25562	TEMP CYCLE	-55C TO 125C		40	300	CYCL	0
				40	1000	CYCL	0
		TOTAL:					0
25563	HAST	120C, 85%R.H.,5.5V		77	100	HOUR	0
		TOTAL:					0
25564	AUTOCLAVE	121C, 2 ATM STEAM, UNBIASED		40	96	HOUR	0
		TOTAL:					0

PROJECT NO: 15314

RELIABILITY MONITOR

DS2401 SEP '00 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2401	C2	0034	DA005635AKA	3	TO92	150	Fastech

PROCESS Single Poly, Single Metal 0.6 µm Standard Process

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

Cf: 60%
Ea: 0.7
β: 1

Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25965	INFANT LIFE	125C, 6.0 VOLTS		234	48	HOUR	0
		TOTAL:	FAIL RATE (Fits):	638	DEVICE HRS:	1.44E+06	0

PROJECT NO: 16373

RELIABILITY MONITOR

DS2502 MAR '00 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2502	C3	0005	DM941226AAB	8	SOIC	150	Carsem S

PROCESS Double Poly, Single Metal 0.6 µm EPROM process

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

Cf: 60%
Ea: 0.7
β: 1
Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25253	INFANT LIFE	125C, 6.0 VOLTS		232	48	HOUR	0
25254	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS		77	336	HOUR	0
		125C, 6.0 VOLTS		77	1000	HOUR	0
		TOTAL:	FAIL RATE (Fits):	81	DEVICE HRS:	1.13E+07	0
25250	ULTRASOUND	J-STD-020		4			0
		TOTAL:					0
25251	STORAGE LIFE	125C		238	24	HOUR	
	MOISTURE SOAK	85C/85% R.H.		238	168	HOUR	
	CONVECTION REFLOW	235C		238	3	PASS	0
		TOTAL:					0
25252	PRECONDITION U/S	J-STD-020		4			0
		TOTAL:					0
25255	TEMP CYCLE	-55C TO 125C		39	300	CYCL	0
				38	1000	CYCL	0
		TOTAL:					0
25257	STORAGE LIFE	150C		39	336	HOUR	0
				39	1000	HOUR	0
		TOTAL:					0

PROJECT NO: 13990

RELIABILITY MONITOR

DS2502 JUN '00 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS2502	C3	0011	DM941230AGB	8	SOIC	150	Carsem S

PROCESS Double Poly, Single Metal 0.6 µm EPROM process

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

Cf: 60%
Ea: 0.7
β: 1

Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25568	INFANT LIFE	125C, 6.0 VOLTS		231	48	HOUR	0
25569	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS		77	336	HOUR	0
		TOTAL:	FAIL RATE (Fits):	193	DEVICE HRS:	4.74E+06	0
25565	ULTRASOUND	J-STD-020		4			0
		TOTAL:					0
25566	STORAGE LIFE	125C		238	24	HOUR	
	MOISTURE SOAK	85C/85% R.H.		238	168	HOUR	
	CONVECTION REFLOW	235C		238	3	PASS	0
		TOTAL:					0
25570	TEMP CYCLE	-55C TO 125C		34	300	CYCL	0
		TOTAL:					0
25572	STORAGE LIFE	150C		34	336	HOUR	0
		TOTAL:					0

PROJECT NO: 15310

RELIABILITY MONITOR

DS5002 APR '00 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS5002	C4	0004	DM925587AAF	80	MQFP	14x20	Carsem

PROCESS Single Poly, Single Metal 0.6 µm Buried contacts w/silicided poly

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

Cf: 60%
Ea: 0.7
β: 1

Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25430	INFANT LIFE	125C, 6.0 VOLTS		199	48	HOUR	0
25431	HIGH VOLTAGE LIFE	125C, 6.0 VOLTS		77	336	HOUR	
		TOTAL:	FAIL RATE (Fits):	758	DEVICE HRS:	1.21E+06	0
25427	ULTRASOUND	J-STD-020		4			0
		TOTAL:					0
25428	STORAGE LIFE	125C		203	24	HOUR	
	MOISTURE SOAK	30C/60% R.H.		203	144	HOUR	
	VAPOR PHASE REFLOW	217C		203	3	PASS	0
		TOTAL:					0
25429	PRECONDITION U/S	J-STD-020		4			0
		TOTAL:					0

PROJECT NO: 14157

RELIABILITY MONITOR

DS87C520 NOV '99 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS87C520	A14	9931	DN901118AAB	44	PLCC	650	ATK (Anam, K)

PROCESS Double Poly, Single Metal 0.8 µm EPROM w/silicided poly(s)

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

Cf: 60%
Ea: 0.7
β: 1
Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
24800	INFANT LIFE	125C, 7.0 VOLTS		219	48	HOUR	0
24801	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS		77	336	HOUR	0
		125C, 7.0 VOLTS		77	1000	HOUR	0
		TOTAL:	FAIL RATE (Fits):	30	DEVICE HRS:	3.06E+07	0
24797	ULTRASOUND	J-STD-020		4			0
		TOTAL:					0
24798	STORAGE LIFE	125C		226	24	HOUR	
	MOISTURE SOAK	30C/60% R.H.		226	240	HOUR	
	VAPOR PHASE REFLOW	217C		226	3	PASS	3
		TOTAL:					3
24799	PRECONDITION U/S	J-STD-020		4			0
		TOTAL:					0
24802	TEMP CYCLE	-55C TO 125C		40	300	CYCL	0
				40	1000	CYCL	0
		TOTAL:					0
24803	HAST	130C, 85%R.H.,5.5V		56	100	HOUR	0
		TOTAL:					0
24804	STORAGE LIFE	150C		43	336	HOUR	0
				43	1000	HOUR	0

PROJECT NO: 14166

RELIABILITY MONITOR

DS87C520 NOV '99 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS87C520	A14	9931	DN901118AAB	44	PLCC	650	ATK (Anam, K)

PROCESS Double Poly, Single Metal 0.8 µm EPROM w/silicided poly(s)

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

Cf: 60%
Ea: 0.7
β: 1

Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION	QUANTITY	READPOINT	UNITS	NO OF FAILS
		TOTAL:				0

JOB NO	FAILURE MODE	FAILURE MECHANISM	CORRECTIVE ACTION
24798	OP40 (2)	DESIGN CHANGE	FIXED WITH REV A15
24798	EPROM	IN VERIFICATION	NA

PROJECT NO: 14166

RELIABILITY MONITOR

DS87C520 FEB '00 MONITOR

DEVICE	REVISION	DATE CD	LOT NUMBER	PINS	PACKAGE	WIDTH	ASSEMBLY SITE
DS87C520	A14	0004	DK935356AAB	44	PLCC	650	ATP (Anam, PI)

PROCESS Double Poly, Single Metal 0.8 µm EPROM w/silicided poly(s)

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

Cf: 60%
Ea: 0.7
β: 1

Tuse: 55 °C
Vuse: 5.5 Volts

JOB NO	DESCRIPT	CONDITION		QUANTITY	READPOINT	UNITS	NO OF FAILS
25120	INFANT LIFE	125C, 7.0 VOLTS		228	48	HOUR	0
25121	HIGH VOLTAGE LIFE	125C, 7.0 VOLTS		77	336	HOUR	0
		TOTAL:	FAIL RATE (Fits):	73	DEVICE HRS:	1.26E+07	0
25117	ULTRASOUND	J-STD-020		4			0
		TOTAL:					0
25118	STORAGE LIFE	125C		234	24	HOUR	
	MOISTURE SOAK	30C/60% R.H.		234	240	HOUR	
	VAPOR PHASE REFLOW	217C		233	3	PASS	0
		TOTAL:					0
25119	PRECONDITION U/S	J-STD-020		4			0
		TOTAL:					0
25122	TEMP CYCLE	-55C TO 125C		40	300	CYCL	0
		TOTAL:					0
25124	STORAGE LIFE	150C		50	336	HOUR	0
		TOTAL:					0

PROJECT NO: 14177