



# RELIABILITY MONITOR SUMMARY

QUARTERLY SUMMARY, QUARTER 3, 1995

October 18, 1995

PERFORMED PER THE REQUIREMENTS OF 25-00008, RELIABILITY MONITOR PROGRAM SPECIFICATION.

ORIGINATOR:

\_\_\_\_\_  
MUOI VU  
QUALITY ENGINEER

\_\_\_\_\_  
DATE

APPROVED:

\_\_\_\_\_  
TOM HOYLE  
SENIOR RELIABILITY ENGINEER

\_\_\_\_\_  
DATE



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## STANDARD STRESS TEST DESCRIPTIONS

Test	Description
HTOL	High Temp Op Life, 150°C, 5.75V
HTOL2	High Temp Op Life, 125°C, 5.75V
HTSSL	High Temp Steady State Life, 150°C, 5.75V
HTSSL2	High Temp Steady State Life, 125°C, 5.75V
DRET	Data Retention Test, Data Bake 165°C, Plastic
DRET2	Data Retention Test, Data Bake 250°C, Hermetic
PCT	Pressure Cooker Test, 121°C, 100% RH, No Bias
HAST	Hi-Accel Saturation Test, 140°C, 85% RH, 5.5V Bias
85/85	Hi-Accel Saturation Test, 85°C, 85V
TC	Temp Cycle, 125°C to -40°C
TC2	Temp Cycle, 150°C to -65°C
HTS	High Temp Storage, 165°C, No Bias



## WAFER FAB AREAS

FAB #	LOCATION
CA	SAN JOSE, CALIFORNIA
TX	ROUND ROCK, TEXAS
MN	BLOOMINGTON, MINNESOTA
FR	MHS, FRANCE

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## ASSEMBLY LOCATIONS

COMPANY/LOCATION	ID
Anam-Buchon/Korea	KOREA-A
Asat/Hongkong	ASAT-B
Cypress/USA	USA-C
Dynesem/Phillipine	PHIL-D
Cypress-Minesota/USA	USA-E
Astra/Indonesia	INDNS-F
Golden Altos/USA	USA-G
Hyundai/Korea	KOREA-H
Indy/USA	USA-I
Kyocera/Japan	JAPAN-K
Anam-Seoul/Korea	KOREA-L
Anam/Phillipine	PHIL-M
Omedata/Indonesia	INDNS-O
Pantronix/USA	USA-P
Anam-Bupyong/Korea	KOREA-Q
TSCM/Taiwan	TAIWAN-R
Chinkteik/Thailand	THLAND-S
OSE/Taiwan	TAIWAN-T
Unisem/Malaysia	MALAY-U
VLSI/USA	USA-V
Toshiba/USA	USA-W
Cypress Bangkok/Thailand	ALPHA-X
Alphatech/Thailand	ALPHA-Y

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### Description of Data Table Column Headings

Column Heading	Description of Column Contents
Prod Line	Product Line or Manufacturing Division
Test	Common code for the stress performed. See table on previous page for detail.
Test Condition	Temp/humidity/bias conditions for the stress. See table on previous page for detail.
Device ID	Cypress manufacturing part number for specific type.
Date Code	Week in which the specific lot was sealed/molded.
Lot Number	Manufacturing (assembly) lot number of material stressed.
Function	Generic product family at Cypress.
Description	Brief description of device function.
Technology	Fabrication process technology. See Cypress Product Matrix for detail.
Process	Generic fabrication process.
Process Location	State where fabrication facility is located. See table on previous page for detail.
Pkg Material	Generic packaging material
Pkg Type	Common code for standard package configuration (PDIP=Plastic Dual-In-Line-Package).
Package Location	Country Location + Initial of assembly house (see table on previous page for detail).
# Pins	Pin count of package in which device is assembled.
Duration	Data Readpoint of stress. For Temp Cycle (TC)=Cycles; all other stresses=Hours.
# Tested	Quantity of devices submitted to this stress/test.
# Failed	Quantity of devices failing at this specific readpoint.
Fail Mode	Failure analysis results from this test, if any.



Quarterly Reliability Report  
Quarter 3, 1995

Prod line	Test	Test Condition	Device	Eval#	D/C	Assembly Lot No	Func- tion	Descr Description	Technology	Pro- cess	Wfr Loc	Pkg type	Assy Loc	No# Pin	Dura tion	Qty Test	Qty Fail	Fail Mode	
CPD	HAST	140C/5.5V	CY2071SC	95131	N/A	12980 (SWR)	TIMING	PLL CLOCK	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	8	128	50	0		
						13036 (SWR)	TIMING	PLL CLOCK	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	8	128	45	0		
			CY2254SC	95331	9513	3505265	TIMING	CLOCK SYN.	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	28	128	45	0		
			CY2292SC	95132	N/A	12980 (SWR)	TIMING	PLL CLOCK	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	16	128	50	0		
	HTOL	150C/5.75V	CY2292SC	95132	N/A	13036 (SWR)	TIMING	PLL CLOCK	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	16	128	45	0		
														16	48	510	0		
															80	126	0		
															500	126	0		
						13036 (SWR)	TIMING	PLL CLOCK	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	16	48	501	0		
															80	116	0		
															500	116	0		
	HTS	165C/NO BIAS	CY2071SC	95131	N/A	12980 (SWR)	TIMING	PLL CLOCK	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	8	336	48	0		
															500	48	0		
															1000	48	0		
			CY2254SC	95331	9534	3520780	TIMING	CLOCK SYN.	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	28	336	45	0		
	HTSSL	150C/5.75V	CY2292SC	95132	N/A	12980 (SWR)	TIMING	PLL CLOCK	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	16	80	76	0		
															168	76	0		
															16	80	78	0	
															168	78	0		
PCT	121C/100%RH	CY2071SC	95131	N/A	12980 (SWR)	TIMING	PLL CLOCK	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	8	168	50	0			
					13036 (SWR)	TIMING	PLL CLOCK	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	8	168	45	0			
		CY2254SC	95331	9510	3506332	TIMING	CLOCK SYN.	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	28	168	45	0			
		CY2292SC	95132	N/A	12980 (SWR)	TIMING	PLL CLOCK	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	16	168	50	0			
T/S	-55C TO 150C	CY2071SC	95131	N/A	13036 (SWR)	TIMING	PLL CLOCK	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	16	168	45	0			
					12980 (SWR)	TIMING	PLL CLOCK	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	8	100	48	0			
														200	48	0			
		CY2254SC	95331	9534	3520780	TIMING	CLOCK SYN.	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	28	100	45	0			
TC2	-65C TO 150C	CY2071SC	95131	N/A	12980 (SWR)	TIMING	PLL CLOCK	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	8	300	49	0			
					13036 (SWR)	TIMING	PLL CLOCK	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	8	300	44	0			
		CY2254SC	95331	9513	3505265	TIMING	CLOCK SYN.	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	28	300	45	0			
		CY2292SC	95132	N/A	12980 (SWR)	TIMING	PLL CLOCK	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	16	300	49	0			
					13036 (SWR)	TIMING	PLL CLOCK	SRAM/LOGIC-LG27	CMOS	MN	SOIC	PHIL-M	16	300	44	0			



Quarterly Reliability Report  
Quarter 3, 1995

Prod line	Test	Test Condition	Device	Eval#	D/C	Assembly Lot No	Func- tion	Descr Description	Technology	Pro- cess	Wfr Loc	Pkg type	Assy Loc	No# Pin	Dura tion	Qty Test	Qty Fail	Fail Mode
FCT	HAST	140C/5.5V	CY74FCT16543TPV	94431	N/A	12994-1	LOGIC	TRANSCEIVER	SRAM/LOGIC-LG27	CMOS	MN	SSOP	KOREA-L	56	128	48	0	
						349506923	LOGIC	TRANSCEIVER	SRAM/LOGIC-LG27	CMOS	MN	SSOP	KOREA-L	56	128	44	0	
						349510196	LOGIC	TRANSCEIVER	SRAM/LOGIC-LG27	CMOS	MN	SSOP	KOREA-L	56	128	48	0	
	HTS	165C/NO BIAS	CY74FCT16543TPV	94431	N/A	12994-1	LOGIC	TRANSCEIVER	SRAM/LOGIC-LG27	CMOS	MN	SSOP	KOREA-L	56	336	48	0	
															500	48	0	
															1000	48	0	
	PCT	121C/100%RH	CY74FCT16543TPV	94431	N/A	12994-1	LOGIC	TRANSCEIVER	SRAM/LOGIC-LG27	CMOS	MN	SSOP	KOREA-L	56	168	47	0	
						12994-2	LOGIC	TRANSCEIVER	SRAM/LOGIC-LG27	CMOS	MN	SSOP	KOREA-L	56	168	47	0	
	T/S	-55C TO 150C	CY74FCT16543TPV	94431	N/A	12994-1	LOGIC	TRANSCEIVER	SRAM/LOGIC-LG27	CMOS	MN	SSOP	KOREA-L	56	100	47	0	
															200	46	0	
	TC2	-65C TO 150C	CY74FCT16543TPV	94431	N/A	349506923	LOGIC	TRANSCEIVER	SRAM/LOGIC-LG27	CMOS	MN	SSOP	KOREA-L	56	300	47	0	
						349510196	LOGIC	TRANSCEIVER	SRAM/LOGIC-LG27	CMOS	MN	SSOP	KOREA-L	56	300	48	0	



Quarterly Reliability Report  
Quarter 3, 1995

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LOGIC	HAST	140C/5.5V	CY7B145-35AC	95164	9516	349505455	SRAM	8K x 9 DP	BICMOS-SM2	BiCMOS	TX	TQFP	KOREA-Q	80	128	50	0	
					9519	349506331	SRAM	8K x 9 DP	BICMOS-SM2	BiCMOS	TX	TQFP	KOREA-Q	80	128	48	0	
	HTOL	150C/5.75V	CY7C425-65PC	94468	9508	349502698	FIFO	1K x 9 FIFO	SRAM/LOGIC-R25	CMOS	MN	PDIP	KOREA-A	32	128	47	0	
			CY7C421-65JI	95291	9525	349511097	FIFO	512 x 9 FIF	SRAM/LOGIC-R25	CMOS	MN	SOJ	KORE-A	32	48	367	0	
			CY7C425-65DM	94468	9516	219505497	FIFO	1K x 9 FIFO	SRAM/LOGIC-R25	CMOS	MN	CDIP	KOREA-A	32	48	504	0	
															80	116	0	
															500	116	0	
			CY7C425-65DMB	94468	9516	219505496	FIFO	1K x 9 FIFO	SRAM/LOGIC-R25	CMOS	MN	CDIP	KOREA-A	32	184	45	0	
			CY7C425-65JC	94468	9508	349502582	FIFO	1K x 9 FIFO	SRAM/LOGIC-R25	CMOS	MN	PLCC	KOREA-A	32	48	504	0	
															80	127	0	
															500	127	0	
			CY7C425-65PC	94468	NA	219507057	FIFO	1K x 9 FIFO	SRAM/LOGIC-R25	CMOS	MN	PDIP	KOREA-A	32	1000	120	0	
				95291	9521	219507057	FIFO	1K x 9 FIFO	SRAM/LOGIC-R25	CMOS	MN	PDIP	KOREA-A	32	48	452	0	
						219507058	FIFO	1K x 9 FIFO	SRAM/LOGIC-R25	CMOS	MN	PDIP	KOREA-A	32	48	495	0	
			VIC068A-GM	95102	9441	349411002	BUS	VME BUS	SRAM/LOGIC-C2AN	CMOS	MN	CPGA	USA-V	144	184	110	0	
			CY101E383-4JC	95255	9439	349411720	ECL	ECL/TTL	BICMOS-SM1	ECL	TX	PLCC	KOREA-A	84	96	430	0	
															96	597	0	2 TEOS
			HTOL2 125C/5.75V												80	98	0	
			HTSSL 150C/5.75V												168	97	0	
															80	78	0	
															168	78	0	
PCT	T/S	-55C TO 150C	CY7B145-35AC	95164	9519	349506331	SRAM	8K x 9 DP	BICMOS-SM2	BiCMOS	TX	TQFP	KOREA-Q	80	168	48	0	
			CY7C425-65JC	94468	9508	349502581	FIFO	1K x 9 FIFO	SRAM/LOGIC-R25	CMOS	MN	PLCC	KOREA-A	32	168	46	0	
	TC2	-65C TO 150C	CY7B145-35AC	95164	9519	349506331	SRAM	8K x 9 DP	BICMOS-SM2	BiCMOS	TX	TQFP	KOREA-Q	80	100	48	0	
															200	47	0	1 EOS
					9527	349508304	SRAM	8K x 9 DP	BICMOS-SM2	BiCMOS	TX	TQFP	KOREA-Q	80	100	50	0	
															200	50	0	
															80	300	50	0
					9527	349508304	SRAM	8K x 9 DP	BICMOS-SM2	BiCMOS	TX	TQFP	KOREA-Q	80	300	49	0	



Quarterly Reliability Report  
Quarter 3, 1995

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LOGIC	TC2	-65C TO 150C	CY7B991-7JC	95342	9529	349510241	TIMING	PSCB	BICMOS-SM1	BiCMOS	TX	PLCC	KOREA-A	32	1000	49	0	
						349512182	TIMING	PSCB	BICMOS-SM1	BiCMOS	TX	PLCC	KOREA-A	32	1000	47	0	
			CY7B9910-7SC	95343	9518	349507475	TIMING	PSCB	BICMOS-SM1	BiCMOS	TX	SOIC	INDNS-O	24	1000	47	0	
						349507474	TIMING	PSCB	BICMOS-SM1	BiCMOS	TX	SOIC	INDNS-O	24	1000	50	0	
			CY7B992-7JI	95342	9526	349511825	TIMING	PSCB	BICMOS-SM1	BiCMOS	TX	PLCC	KOREA-A	32	1000	47	0	
						349506624	TIMING	PSCB	BICMOS-SM1	BiCMOS	TX	SOIC	INDNS-O	24	1000	50	0	
			CY7C425-65DM	94468	9516	219505497	FIFO	1K x 9 FIFO SRAM/LOGIC-R25	CMOS	MN	CDIP	KOREA-A	32	1000	45	0		
						349502581	FIFO	1K x 9 FIFO SRAM/LOGIC-R25	CMOS	MN	PLCC	KOREA-A	32	1000	46	0		
			CY7C460-40PC	M51017	9434	349412376	FIFO	8K X 9 FIFO SRAM/LOGIC-R21	CMOS	MN	PDIP	INDNS-O	28	1000	46	0		





Quarterly Reliability Report  
Quarter 3, 1995

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MTI	TC	-40C TO 100C	CYM1441PZ	95194	9523	9523938	SRAM	256K x 8	SMT	STD	SJ	ZIP	AMT	60	100	16	0	
															500	16	0	
			CYM1821PM	95194	9521	9521928	SRAM	64K x 32	SMT	STD	SJ	SIMM	AMT	64	100	17	0	
															500	17	0	
			CYM7232PC	95194	9522	9522956	SRAM	DRAM ACC.	SMT	STD	SJ	PGA	AMT	401	100	17	0	
															500	17	0	



Quarterly Reliability Report  
Quarter 3, 1995

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PLD	DRET	165C/NO BIAS	CY7C342-40JC	M52019	9521	349509096	PLD	REPROG.PAL	FAMOS-P20DHL	CMOS	TX	PLCC	KOREA-A	68	168	79	0	
			PALC22V10B-15PC	94392	9504	349501060	PLD	S/PLD24	FAMOS-P20D	CMOS	TX	PLCC	INDNS-O	24	1000	79	0	
															168	80	0	
															552	80	0	
	HAST	140C/5.5V	PALC22V10-40JI	M52006	9514	349504808	PLD	S/PLD24	FAMOS-P13	CMOS	TX	PLCC	KOREA-H	28	128	80	0	
			PALC22V10B-15PC	94392	9504	349501060	PLD	S/PLD24	FAMOS-P20D	CMOS	TX	PLCC	INDNS-O	24	128	51	0	
	HTOL	150C/5.75V	CY7C375-100GMB	94066	9443	219412956	PLD	128 MCEL FL	FLASH-FL22D	CMOS	CA	CPGA	ALPHA-X	160	184	80	0	
			PALC22V10B-15PC	94392	9504	349501060	PLD	S/PLD24	FAMOS-P20D	CMOS	TX	PLCC	INDNS-O	24	48	503	0	
															80	119	0	
															500	117	0	2 EOS
	HTOL2	125C/5.75V	CY7C342-40JC	95281	9523	349510034	PLD	REPROG.PAL	FAMOS-P20DHL	CMOS	TX	PLCC	KOREA-A	68	24	455	0	
						349510035	PLD	REPROG.PAL	FAMOS-P20DHL	CMOS	TX	PLCC	KOREA-A	68	24	471	0	1 EOS
							PLD	REPROG.PAL	FAMOS-P20DHL	CMOS	TX	PLCC	KOREA-A	68	24	472	0	1 EOS
			CY7C375-100AC	94066	9427	49407720	PLD	128 MCEL FL	FLASH-FL22D	CMOS	CA	TQFP	KOREA-A	160	168	140	0	
															1078	131	1	1 PARTICLE/1 EOS
															1617	123	0	39 TEOS
															500	154	0	
															500	153	0	
															1000	142	0	
	HTSSL	150C/5.75V	PALC22V10B-15PC	94392	9504	349501060	PLD	S/PLD24	FAMOS-P20D	CMOS	TX	PLCC	INDNS-O	24	80	50	0	1 EOS
															168	49	0	1 EOS
	PCT	121C/100%RH	PALC22V10B-15PC	94392	9504	349501060	PLD	S/PLD24	FAMOS-P20D	CMOS	TX	PLCC	INDNS-O	24	168	51	0	
															288	51	0	
	TC2	-65C TO 150C	CY7C342-40JC	M52020	9521	349509096	PLD	REPROG.PAL	FAMOS-P20DHL	CMOS	TX	PLCC	KOREA-A	68	300	50	27	27 TOPSIDE CRACKS <sup>1</sup>
			CY7C342B-35HC	M52008	9450	349415065	PLD	REPROG.PAL	FAMOS-P26	CMOS	TX	WHLC	PHIL-M	68	300	50	0	
															1000	50	0	
			PALC22V10-40JI	M52007	9514	349504808	PLD	S/PLD24	FAMOS-P13	CMOS	TX	PLCC	KOREA-H	28	300	49	0	
															1000	49	0	
			PALC22V10B-15PC	94392	9504	349501060	PLD	S/PLD24	FAMOS-P20D	CMOS	TX	PLCC	INDNS-O	24	300	51	0	
															1000	51	0	
	TEV	0 READ POINT	CY7C342-40JC	M52016	9521	349509096	PLD	REPROG.PAL	FAMOS-P20DHL	CMOS	TX	PLCC	KOREA-A	68	-5	119	0	
															25	120	0	1 TEST PROG DEF
															85	119	0	

<sup>1</sup> Process being upgraded to improve preconditioned Temperature Cycle performance.



Quarterly Reliability Report  
Quarter 3, 1995

Prod line	Test	Test Condition	Device	Eval#	D/C	Assembly Lot No	Func- tion	Descr Description	Technology	Pro- cess	Wfr Loc	Pkg type	Assy Loc	No# Pin	Dura tion	Qty Test	Qty Fail	Fail Mode
PROM	HTOL	150C/5.75V	CY7C264-55WMB	95154	9514	219505060	PROM	8K x 8	FAMOS-P20D	CMOS	TX	WDIP	ALPHA-X	24	184	50	0	
	TC2	-65C TO 150C	CY7C271-55WC	M52009	9516	219505577	PROM	32K x 8	FAMOS-P23	CMOS	TX	WDIP	ALPHA-X	28	300	50	0	
															1000	50	0	



Quarterly Reliability Report  
Quarter 3, 1995

Prod line	Test	Test Condition	Device	Eval#	D/C	Assembly Lot No	Function	Description	Technology	Process	Wfr Loc	Pkg type	Assy Loc	No# Pin	Dura tion	Qty Test	Qty Fail	Fail Mode
SRAM	HAST	140C/5.5V	CY7B181-20NC	95159	9521	12958(SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	128	5	0	
															128	40	0	
						12959(SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	128	7	0	
															128	43	0	
			CY7C1031-12JC	95198	9507	349502771	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	128	45	0	
					9510	349503511	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	128	45	0	
					9521	349508433	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	128	45	0	
			CY7C178-12JC	95171	9524	349511092	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	128	47	0	
					9525	349512212	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	128	96	0	
			CY7C199-15VC	95149	9520	349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	128	54	0	
				95253	9525	13058(SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	128	54	0	
						13059(SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	128	54	0	
						13060(SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	128	54	0	
	HTOL	150C/5.75V	CY7C1031-12JC	95198	9506	349501977	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	80	115	0	1 EOS
															168	115	0	
															500	114	0	
					9507	349502172	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	80	119	0	1 EOS
															168	118	0	
															500	116	0	
															1000	116	0	
					9510	349503220	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	80	116	0	
															500	116	1	UNKNOWN
					9521	349508433	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	80	129	0	2 EOS
															168	129	0	
			CY7C109A-35VC	95185	9516	349506060	SRAM	128K x 8	SRAM/LOGIC-R25	CMOS	MN	SOJ	KOREA-L	32	48	948	0	
						349506066	SRAM	128K x 8	SRAM/LOGIC-R25	CMOS	MN	SOJ	KOREA-L	32	48	1104	0	
					9517	349506328	SRAM	128K x 8	SRAM/LOGIC-R25	CMOS	MN	SOJ	KOREA-L	32	48	1138	0	
			CY7C178-12JC	95171	9516	349506334	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	48	672	0	
						349506337	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	80	117	0	
															500	117	0	
															1000	117	0	
					9522	349509888	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	80	108	0	4 EOS
															500	108	0	
															1000	108	0	
															2000	108	0	
					9524	349511092	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	48	336	0	
					9525	349512212	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	48	336	0	
															80	120	0	
			CY7C199-15VC	95149	9520	349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	500	120	0	
															48	350	0	1 EOS
															1000	118	0	1 EOS
															2000	119	0	
					N/A	349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	80	120	0	
	HTOL2	125C/5.75V	CY7C109A-35VC	M44017	9501	349416267	SRAM	128K x 8	SRAM/LOGIC-R25	CMOS	MN	SOJ	KOREA-L	32	500	120	0	
															96	120	0	
															500	120	0	
															1000	120	0	
															2000	115	0	5 EOS
	HTS	165C/NO BIAS	CY7B181-20NC	95159	9521	12959(SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	336	45	0	
			CY7C199-15VC	95253	9525	13058(SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	500	45	0	
															336	54	0	

Quarterly Reliability Report  
Quarter 3, 1995

Prod line	Test	Test Condition	Device	Eval#	D/C	Assembly Lot No	Function	Description	Technology	Process	Wfr Loc	Pkg type	Assy Loc	No# Pin	Dura tion	Qty Test	Qty Fail	Fail Mode
SRAM	HTSSL	150C/5.75V	CY7C1031-12JC	95198	9507	349502172	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	1000	54	0	
															80	78	0	
						349503220	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	168	78	0	
															80	76	0	
															168	76	0	



**CYPRESS**  
**SEMICONDUCTOR**  
**PRODUCT RELIABILITY**

HTSSL2 125C/5.75V	CY7C178-12JC	95171	9521	349508433	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	80	129	1	1	IONIC CONTAMINATION
			9504	349501131	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	168	128	0		
				349501132	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	80	78	0		
													168	78	0		
													80	78	0		
			9505	349500584	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	168	78	0		
													80	78	0		
													168	78	0		
													80	78	0		
													168	78	0		
CY7C199-15VC	95149	9520	349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	80	76	0	1	EOS	
			349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	80	76	0			
			349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	80	76	0			
			349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	80	76	0			
			349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	80	76	0			
			349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	80	76	0			
			349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	80	76	0			
			349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	80	76	0			
			349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	80	76	0			
			349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	80	76	0			
CY7C109A-35VC	M44018	9501	349416267	SRAM	128K x 8	SRAM/LOGIC-R25	CMOS	MN	SOJ	KOREA-L	32	96	120	0			
			349416267	SRAM	128K x 8	SRAM/LOGIC-R25	CMOS	MN	SOJ	KOREA-L	32	96	120	0			
			349416267	SRAM	128K x 8	SRAM/LOGIC-R25	CMOS	MN	SOJ	KOREA-L	32	96	120	0			
			349416267	SRAM	128K x 8	SRAM/LOGIC-R25	CMOS	MN	SOJ	KOREA-L	32	96	120	0			
			349416267	SRAM	128K x 8	SRAM/LOGIC-R25	CMOS	MN	SOJ	KOREA-L	32	96	120	0			
			349416267	SRAM	128K x 8	SRAM/LOGIC-R25	CMOS	MN	SOJ	KOREA-L	32	96	120	0			
			349416267	SRAM	128K x 8	SRAM/LOGIC-R25	CMOS	MN	SOJ	KOREA-L	32	96	120	0			
			349416267	SRAM	128K x 8	SRAM/LOGIC-R25	CMOS	MN	SOJ	KOREA-L	32	96	120	0			
			349416267	SRAM	128K x 8	SRAM/LOGIC-R25	CMOS	MN	SOJ	KOREA-L	32	96	120	0			
			349416267	SRAM	128K x 8	SRAM/LOGIC-R25	CMOS	MN	SOJ	KOREA-L	32	96	120	0			
CY7C199-15PC	95198	N/A	219412393	SRAM	256K/R3	SRAM/LOGIC-R3	CMOS	CA	PDIP	ALPHA-X	28	500	120	0			
			219412393	SRAM	256K/R3	SRAM/LOGIC-R3	CMOS	CA	PDIP	ALPHA-X	28	500	120	0			
			219412393	SRAM	256K/R3	SRAM/LOGIC-R3	CMOS	CA	PDIP	ALPHA-X	28	500	120	0			
			219412393	SRAM	256K/R3	SRAM/LOGIC-R3	CMOS	CA	PDIP	ALPHA-X	28	500	120	0			
			219412393	SRAM	256K/R3	SRAM/LOGIC-R3	CMOS	CA	PDIP	ALPHA-X	28	500	120	0			
			219412393	SRAM	256K/R3	SRAM/LOGIC-R3	CMOS	CA	PDIP	ALPHA-X	28	500	120	0			
			219412393	SRAM	256K/R3	SRAM/LOGIC-R3	CMOS	CA	PDIP	ALPHA-X	28	500	120	0			
			219412393	SRAM	256K/R3	SRAM/LOGIC-R3	CMOS	CA	PDIP	ALPHA-X	28	500	120	0			
			219412393	SRAM	256K/R3	SRAM/LOGIC-R3	CMOS	CA	PDIP	ALPHA-X	28	500	120	0			
			219412393	SRAM	256K/R3	SRAM/LOGIC-R3	CMOS	CA	PDIP	ALPHA-X	28	500	120	0			
CY7B181-20NC	95159	9521	12958 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	168	45	0			
			12959 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	168	45	0			
			12958 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	168	45	0			
			12959 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	168	45	0			
			12958 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	168	45	0			
			12959 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	168	45	0			
			12958 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	168	45	0			
			12959 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	168	45	0			
			12958 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	168	45	0			
			12959 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	168	45	0			
CY7C1031-12JC	95198	9510	349501977	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	168	45	0			
			349502172	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	168	45	0			
			349501131	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	168	45	0			
			349501132	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	168	45	0			
			349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	168	41	0			
			349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	168	54	0			
			349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	168	54	0			
			349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	168	54	0			
			349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	168	54	0			
			349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	168	54	0			
CY7C199-15VC	95149	9520	13058 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
			13059 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
			13060 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
			13058 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
			13059 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
			13060 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
			13058 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
			13059 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
			13060 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
			13058 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
CY7B181-20NC	95159	9521	12959 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	100	47	0			
			12958 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	100	47	0			
			12959 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	100	47	0			
			12958 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	100	47	0			
			12959 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	100	47	0			
			12958 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	100	47	0			
			12959 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	100	47	0			
			12958 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	100	47	0			
			12959 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	100	47	0			
			12958 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	100	47	0			
CY7C1031-12JC	95198	9510	349503220	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	300	45	0			
			349508433	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	300	45	0			
			349508433	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	300	45	0			
			349508433	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	300	45	0			
			349508433	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	300	45	0			
			349508433	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	300	45	0			
			349508433	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	300	45	0			
			349508433	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	300	45	0			
			349508433	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	300	45	0			
			349508433	SRAM	64K x 18	SRAM/LOGIC-R3	CMOS	CA	PLCC	KOREA-A	52	300	45	0			
CY7C178-12JC	95171	9524	349511092	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	300	96	0			
			349511092	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	300	96	0			
			349511092	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	300	96	0			
			349511092	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	300	96	0			
			349511092	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	300	96	0			
			349511092	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	300	96	0			
			349511092	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	300	96	0			
			349511092	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	300	96	0			
			349511092	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	300	96	0			
			349511092	SRAM	32K x 18	SRAM/LOGIC-R28	CMOS	MN	PLCC	KOREA-A	52	300	96	0			
CY7C199-15VC	95149	9520	13058 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
			13059 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
			13060 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
			13058 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
			13059 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
			13060 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
			13058 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
			13059 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
			13060 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
			13058 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	168	54	0			
CY7B181-20NC	95159	9521	12959 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	100	47	0			
			12958 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	100	47	0			
			12959 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	100	47	0			
			12958 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	100	47	0			
			12959 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX	PQFP	PHIL-M	80	100	47	0			
			12958 (SWR)	SRAM	CACHE	BICMOS-SM2	BiCMOS	TX</									



Quarterly Reliability Report  
Quarter 3, 1995

Prod line	Test	Test Condition	Device	Eval#	D/C	Assembly Lot No	Func- tion	Descr Description	Technology	Pro- cess	Wfr Loc	Pkg type	Assy Loc	No# Pin	Dura tion	Qty Test	Qty Fail	Fail Mode
SRAM	TC2	-65C TO 150C	CY7C199-15VC	95149	9520	349508890	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	F4	SOJ	INDNS-O	28	300	54	0	
															1000	54	0	
				95253	9525	13058 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	300	54	0	
						13059 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	300	54	0	
						13060 (SWR)	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	KOREA-A	28	300	54	0	
				95321	9530	349514437	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	INDNS-F	28	300	45	0	
					9531	349514435	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	INDNS-F	28	300	45	0	
						349514436	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	INDNS-F	28	300	45	0	
															1000	45	0	
					9532	349516700	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	INDNS-F	28	300	50	0	
															1000	50	0	
					9533	349516991	SRAM	256K/R28	SRAM/LOGIC-R28	CMOS	MN	SOJ	INDNS-F	28	300	50	0	
															1000	50	0	
	TEV	0 READ POINT	CY7C109A-35VC	M52005	9522	349509018	SRAM	128K x 8	SRAM/LOGIC-R25	CMOS	MN	SOJ	KOREA-L	32	-5	120	0	
															25	120	0	
															85	120	0	
				M52021	9528	349512520	SRAM	128K x 8	SRAM/LOGIC-R25	CMOS	MN	SOJ	KOREA-L	32	-5	120	0	
															25	120	0	
															85	120	0	
			CY7C199-45VI	M52015	9521	219507380	SRAM	256K/R2	SRAM-LOGIC/R21	CMOS	TX	SOJ	ALPHA-X	28	-5	127	0	
															25	127	0	
															85	127	0	