

CYPRESS SEMICONDUCTOR CORPORATION

PRODUCT RELIABILITY REPORT

QUARTER 4, 1998



PERFORM PER THE REQUIREMENT OF 25-00008, RELIABILITY MONITOR PROGRAM SPECIFICATION

Ed Russell
Reliability Manager

STANDARD STRESS TEST DESCRIPTIONS

<u>TEST</u>	<u>DESCRIPTION</u>
HTOL	High Temp Op Life, 150°C, Dynamic 115% V _{CC} Nominal
HTOL2	High Temp Op Life, 125°C, Dynamic 115% V _{CC} Nominal
HTSSL	High Temp Steady State Life, 150°C, Static 115% V _{CC} Nominal
HTSSL2	High Temp Steady State Life, 125°C, Static 115% V _{CC} Nominal
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, Static 100% V _{CC} Nominal
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

<u>FAB #</u>	<u>LOCATION</u>
CA	San Jose, California
TX	Round Rock, Texas
MN	Bloomington, Minnesota
FR	MHS, France

ASSEMBLY LOCATION

<u>ID</u>	<u>COMPANY/LOCATION</u>
KOREA-A	Anam-Buchon/Korea
ASAT-B	Asat/Hongkong
USA-C	Cypress/USA
PHIL-D	Dynesem/Philippines
USA-E	Cypress-Minnesota/USA
INDNS-F	Astra/Indonesia
TAIWAN-G	ASE/Taiwan
KOREA-H	Hyundai/Korea
MALAY-J	ASE/Malaysia
THLAND-K	TMS/Thailand
KOREA-L	Anam-Seoul/Korea
PHIL-M	Anam/Philippines
USA-N	Express/USA
INDNS-O	Omedata/Indonesia
USA-P	Pantronix/USA
KOREA-Q	Anam-Bupyong/Korea
PHIL-R	Cypress/Philippines
USA-S	ATM/USA
TAIWAN-T	OSE/Taiwan
MALAY-U	Unisem/Malaysia
USA-V	Aplus/USA
USA-W	Toshiba/USA
ALPHA-X	Cypress Bangkok/Thailand
ALPHA-Y	Alphatech/Thailand
THLAND-Z	Hana/Thailand

DESCRIPTION OF DATA TABLE COLUMN HEADINGS

<u>COLUMN HEADING</u>	<u>DESCRIPTION OF COLUMN CONTENTS</u>
Division	Cypress Manufacturing Division
Test	Common code for the stress performed. See table on previous page for detail.
Test Condition	Tem/humidity/bias condition for the stress. See table on previous for detail
Device ID	Cypress part number
Date Code	Week in which specific lot was marked/sealed/molded.
Lot Number	Manufacturing (assembly) lot number
Function	Generic product family at Cypress
Description	Brief description of device function
Technology	Fabrication process technology.
Process	Generic fabrication process
Pkg Material	Generic packaging material
Pkg Type	Common code for standard package configuration (PDIP=Plastic Dual-In-Line-Package).
Pkg Location	Country Location + Initial of assembly house (see table on prvious page for detail).
# Pins	Pin cont of package in which device is assembled.
Duration	Data Readpoint of stress. For Temp Cycle (TC) = Cycles; all other stresses=Hours.
# Test	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.

RELIABILITY DATA SUMMARY
(Q498)

LONG TERM FAILURE RATE SUMMARY					
PROCESS	DEVICE HOURS			FAILED	FAILURE MODE
	150C	125C	TOTAL * @ 150C		
FAMOS TOTAL	84,208	0	84,208	0	
FLASH TOTAL	0	0	0	0	
SRAM/LOGIC TOTAL	2,868,483	238,500	2,946,234	2	1 UNKNOWN, 1 FA PENDING
BICMOS TOTAL	0	465,500	151,753	0	
LFR TOTAL	2,952,691	704,000	3,182,195	2	1 UNKNOWN, 1 FA PENDING
EARLY FAILURE RATE SUMMARY					
PROCESS	UNITS TESTED			FAILED	FAILURE MODE
	150C	125C	TOTAL @ 150C		
FAMOS TOTAL	2,538	877	3,415	0	
FLASH TOTAL	0	0	0	0	
SRAM/LOGIC TOTAL	30,428	8,610	39,038	3	1 VOID IN OXIDE, 1 OPEN BOND LIFT, 1 FA PENDING
BICMOS TOTAL	0	0	0	0	
EFR TOTAL	32,966	9,487	42,453	3	1 VOID IN OXDIE, 1 OPEN BOND LIFT, 1 FA PENDING
HTSSL FAILURE RATE SUMMARY					
PROCESS	DEVICE HOURS			FAILED	FAILURE MODE
	150C	125C	TOTAL* @ 150C		
FAMOS TOTAL	12,768	0	12,768	0	
FLASH TOTAL	0	0	0	0	
SRAM/LOGIC TOTAL	91,896	152,000	141,448	0	
BICMOS TOTAL	0	57,404	18,714	0	
HTSSL TOTAL	104,664	209,404	172,930	0	
TEMP CYCLE FAILURE RATE SUMMARY					
PROCESS	DEVICE CYCLE			FAILED	FAILURE MODE
	150C	125C	TOTAL* @ 150C		
FAMOS TOTAL	83,700	0	83,700	0	
FLASH TOTAL	15,000	0	15,000	0	
SRAM/LOGIC	619,200	0	460,500	1	1 OPEN BOND LIFT

* Equivalent Total Device Hours/Cycles. Derating factors are used for lower stress condition.

TOTAL					
BICMOS TOTAL	15,000	0	15,000	0	
TC TOTAL	732,900	0	574,200	1	1 OPEN BOND LIFT

RELIABILITY DATA SUMMARY
(Q498)

HAST FAILURE RATE SUMMARY					
PROCESS	DEVICE HOURS			FAILED	FAILURE MODE
	150C	125C	TOTAL* @ 150C		
FAMOS TOTAL	5,760	12,032	12,149	0	
FLASH TOTAL	0	0	0	0	
SRAM/LOGIC TOTAL	99,328	32,256	116,456	2	1 OPEN BOND LIFT, 1 OPEN HEEL
BICMOS TOTAL	10,240	9,728	15,406	4	4 OPEN BOND LIFT
HAST TOTAL	115,328	54,016	144,010	6	5 OPEN BOND LIFT, 1 OPEN HEEL
LTOL FAILURE RATE SUMMARY					
PROCESS	DEVICE HOURS		FAILED	FAILURE MODE	
FAMOS TOTAL	NO DATA		NO DATA		
FLASH TOTAL	NO DATA		NO DATA		
SRAM/LOGIC TOTAL	46,000		0		
BICMOS TOTAL	NO DATA		NO DATA		
LTOL TOTAL	46,000		0		
PCT FAILURE RATE SUMMARY					
PROCESS	DEVICE HOURS		FAILED	FAILURE MODE	
FAMOS TOTAL	13,944		0		
FLASH TOTAL	0		0		
SRAM/LOGIC TOTAL	188,664		2	1 PARTICLE, 1 TOPSIDE CRACK	
BICMOS TOTAL	13,440		0		
PCT TOTAL	216,048		2	1 PARTICLE, 1 TOPSIDE CRACK	
DRET FAILURE RATE SUMMARY					
PROCESS	PLASTIC (165C)		HERMETIC(250C)		FAILURE MODE
	DHR	REJ	DHR	REJ	
FAMOS TOTAL	0	0	0	0	
FLASH TOTAL	0	0	0	0	
SRAM/LOGIC TOTAL	0	0	0	0	
BICMOS	0	0	0	0	

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Technology	Test	Divi- Test	Func- Condition	sion tion	Assembly Device	Pro- Eval#	Wfr D/C	Pkg Lot No	Assy Description	No cess	Dura Loc	Qty type	Qty Loc	Pin tion	Test	Fail	Fail	Mode
BICMOS-SM1	HAST	130C/4.5V	DCD	CHNL	CY7B991-JC	M83025	9818	219803361	PSCB	BiCMOS TX	PLCC ALPHA-X	32	128	76	4	4	Open-	Bond Lift
	140C/4.5V	DCD	CHNL	CY7B991-JC	M84019	9838	219806615	PSCB	BiCMOS TX	PLCC ALPHA-X	32	128	80	0				
	HTOL2	125C/5.75V	DCD	CHNL	CY7B991-JC	M82053	9807	219800993	PSCB	BiCMOS TX	PLCC ALPHA-X	32	500	115	0			
										1000	114	0	1	EOS				
										2000	111	0	3	EOS				
					M83015	9818	219803361	PSCB	BiCMOS TX	PLCC ALPHA-X	32	500	120	0				
										1000	120	0						
										2000	120	0						
	HTSSL2	125C/5.5	DCD	CHNL	CY7B991-JC	M82026	9807	219800993	PSCB	BiCMOS TX	PLCC ALPHA-X	32	96	114	0	1	EOS	
										500	115	0						
	PCT	121C/100%RH	DCD	CHNL	CY7B991-JC	M84017	9838	219806615	PSCB	BiCMOS TX	PLCC ALPHA-X	32	168	80	0			
	TC2	-65C TO 150C	DCD	CHNL	CY7B991-JC	M84018	9838	219806615	PSCB	BiCMOS TX	PLCC ALPHA-X	32	300	50	0			

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Technology	Test	Divi- Test Condition	Func- sion tion	Device	Assembly Eval#	Pro- D/C Lot No	Wfr Pkg Description	Assy cess	No Loc	Dura type	Qty Loc	Qty Pin	tion Test	Fail	Fail	Mode
FAMOS-E3	HAST	130C/5.5V	PLD	37K	CY37256P160-AC	98415	9840 619811133	256 MCEL	CMOS	TW	TQFP	TAIWAN-G	160	128	20	0
							128 29 0									
					CY37256P256-BGC	98193	9825 619805724	256 MCEL	CMOS	TW	BGA	TAIWAN-G	292	128	45	0
	140C/5.5V	PLD	37K	CY37256P256-BGC	98193	9828 619807607	256 MCEL	CMOS	TW	BGA	TAIWAN-G	292	128	45	0	
HTOL	150C/-55C	PLD	37K	CY37256P256-BGC	98193	9828 619807607	256 MCEL	CMOS	TW	BGA	TAIWAN-G	292	48	250	0	
	150C/5.75	PLD	37K	CY37256VP160-AC	98423	9838 619810670	256 MCEL	CMOS	TW	TQFP	KOREA-Q	160	108	76	0	
	150C/5.75V	PLD	37K	CY37256P256-BGC	98193	9825 619805724	256 MCEL	CMOS	TW	BGA	TAIWAN-G	292	48	250	0	
							80 76 0									
							500 76 0									
					9828 619807607	256 MCEL	CMOS	TW	BGA	TAIWAN-G	292	80	76	0		
							500 76 0									
HTS	165C/NO BIAS	PLD	37K	CY37256P160-AC	98415	9840 619811133	256 MCEL	CMOS	TW	TQFP	TAIWAN-G	160	336	48	0	
					CY37256P256-BGC	98193	9825 619805724	256 MCEL	CMOS	TW	BGA	TAIWAN-G	292	336	45	0
							1000 45 0									
HTSSL	150C/5.75V	PLD	37K	CY37256VP160-AC	98423	9838 619810670	256 MCEL	CMOS	TW	TQFP	KOREA-Q	160	168	76	0	
T/S	-55C TO 150C	PLD	37K	CY37256P160-AC	98415	9840 619811133	256 MCEL	CMOS	TW	TQFP	TAIWAN-G	160	100	48	0	
							200 48 0									
					CY37256P256-BGC	98193	9828 619807607	256 MCEL	CMOS	TW	BGA	TAIWAN-G	292	100	45	0
							200 45 0									
TC2	-65C TO 150C	PLD	37K	CY37256P160-AC	98415	9840 619811133	256 MCEL	CMOS	TW	TQFP	TAIWAN-G	160	300	48	0	
					619811134	256 MCEL	CMOS	TW	TQFP	TAIWAN-G	160	300	48	0		
					619811135	256 MCEL	CMOS	TW	TQFP	TAIWAN-G	160	300	48	0		
					CY37256P256-BGC	98193	9825 619805724	256 MCEL	CMOS	TW	BGA	TAIWAN-G	292	300	45	0
					9828 619807607	256 MCEL	CMOS	TW	BGA	TAIWAN-G	292	300	45	0		

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Technology	Test	Divi- Test	Func- Condition	sion tion	Device	Assembly Eval#	Pro- D/C	Wfr Lot	Pkg No	Assy Description	No cess	Dura Loc	Qty type	Qty Loc	Pin tion	Test	Fail	Fail	Mode
FAMOS-E3	TC2	-65C	TO 150C	PLD	37K	CY37256VP256-BG	98193	9830	619807496	256	MCEL	CMOS	TW	BGA	TAIWAN-G	292	300	45	0

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FAMOS-P20	HTOL	140C/5.75V	PLD	MAX	CY7C344-HMB	98153	9815	219802900P	REPROG.PAL	CMOS	TX	CERQ	ALPHA-X	28	72	213	0		
								219802901P	REPROG.PAL	CMOS	TX	CERQ	ALPHA-X	28	72	211	0		
								9818 219803380P	REPROG.PAL	CMOS	TX	CERQ	ALPHA-X	28	72	206	0	6	EOS
					CY7C344-JC	98241	9838	219806567	REPROG.PAL	CMOS	TX	PLCC	ALPHA-X	28	72	1408	0		
	HTOL2	125C/5.75V	PLD	MAX	CY7C341-JC	M84034	9843	619812107	REPROG.PAL	CMOS	TX	PLCC	KOREA-A	84	96	83	0		
								M84037	9843	619812108	REPROG.PAL	CMOS	TX	PLCC	KOREA-A	84	96	40	0
								96	135	0									
	125C/5/75		PLD	MAX	CY7C341-JC	M82032	9814	619803505	REPROG.PAL	CMOS	TX	PLCC	KOREA-A	84	96	120	0		
	PCT	121C/100%RH	PLD	MAX	CY7C341-JC	M84035	9843	619812107	REPROG.PAL	CMOS	TX	PLCC	KOREA-A	84	168	83	0		

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FAMOS-P26	HTOL2	125C/5.75V	MPD	PROM	CY27C010-PC	M82010	9747	619709651	128K x 8	CMOS	TX	PDIP	KOREA-H	32	96	499	0			

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Technology	Test	Divi- Test	Func- Condition	sion tion	Device	Assembly Eval#	Pro- D/C	Wfr Lot	Pkg No	Assy Description	No cess	Dura Loc	Qty type	Qty Loc	Pin tion	Test	Fail	Fail	Mode
FLASH-FL24D	TC2	-65C	TO 150C	PLD	FLASH	CY7C372I-JC	M82002	9810	219801660	64-MCEL	FL	CMOS	TX	PLCC	ALPHA-X	44	300	50	0

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Technology	Test	Divi- Test	Func- Condition	sion tion	Device	Assembly Eval#	Pro- D/C	Wfr Lot	Pkg No	Assy Description	No cess	Dura Loc	Qty type	Qty Loc	Pin tion	Test	Fail	Fail	Mode
SRAM/LOGIC-L27	HTSSL2	125C/5.5V	DCD	CHNL	CY7C955-NI	M83033	9729	619704922	TRANSCEIVER	CMOS	MN	PQFP	KOREA-L	128	96	120	0		
							500	120	0										

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Technology	Test	Divi- Func- Condition	tion tion	Assembly Device	Eval#	Pro- D/C Lot No	Wfr Pkg Description	Assy cess	No Loc	Dura type	Qty Loc	Qty Pin	tion tion	Test	Fail	Fail	Mode
SRAM/LOGIC-L28	HAST	140C/3.63		CPD TTECH CY2278APAC	98396	9842 619811691	CLOCK SYN.	CMOS	MN	TSSO CSPI-R	48 128	50	0				
	140C/3.63V	CPD TTECH CY2210PVC		98235	9826 619807319/	CLOCK SYN.	CMOS	TX	SSOP CSPI-R	28 128	47	0	1	EOS			
HTOL	150C/4.62V	CPD TTECH CY2210PVC		98235	9826 619807319/	CLOCK SYN.	CMOS	TX	SSOP CSPI-R	28 48	210	0					
											48 210	0					
											48 299	0	1	EOS			
											48 300	0					
	150C/4.6V	CPD TTECH CY2210PVC		98235	9826 619807319/	CLOCK SYN.	CMOS	TX	SSOP CSPI-R	28 500	119	0					
	150C/5.75V	CPD TTECH CY5037AES		98225	9828 619808136	CLOCK SYN.	CMOS	MN	SOIC CSPI-R	20 48	112	0					
											48 148	0					
											48 148	0					
											48 148	0					
											48 148	0					
											48 148	0					
											48 148	0					
											500 116	0					
HTOL2	125C/5.75V	DCD VME CY7C960-NC		98267	9831 619808580/	BUS Inter.	CMOS	TX	PQFP HK-B	64 96	405	0					
											96 600	0					
HTS	165C/NO BIAS	CPD TTECH CY2278APAC		98396	9842 619811691	CLOCK SYN.	CMOS	MN	TSSO CSPI-R	48 336	50	0					
											1000 49	0					
PCT	121C/100%RH	DCD VME CY7C960-NC		98267	9831 619808580/	BUS Inter.	CMOS	TX	PQFP HK-B	64 168	54	0					
T/S	-55C TO 150C	CPD TTECH CY2278APAC		98396	9842 619811691	CLOCK SYN.	CMOS	MN	TSSO CSPI-R	48 100	50	0					
											200 50	0					
TC2	-65C TO 150C	CPD TTECH CY2210PVC		98235	9826 619807319/	CLOCK SYN.	CMOS	TX	SSOP CSPI-R	28 300	60	1	1	Open- Bond Lift			
		CY22751PVC		M83018	9804 619800309	CLOCK SYN.	CMOS	MN	SSOP CSPI-R	48 300	50	0					
		CY2278APAC		98396	9842 619811691	CLOCK SYN.	CMOS	MN	TSSO CSPI-R	48 300	47	0					
					619811722	CLOCK SYN.	CMOS	MN	TSSO CSPI-R	48 300	45	0					
					619811781	CLOCK SYN.	CMOS	MN	TSSO CSPI-R	48 300	48	0					

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SRAM/LOGIC-R28	HAST	130C/5.5V		DCD FIFO	CY7C4245-AC	M82008	9750	619710597	4Kx18	FIFO	CMOS	MN	TQFP	KOREA-Q	64	128	77	2 1 Open- Bond Lift / 1
										Open- Heel								
					M84022	9837	619810547	4Kx18	FIFO	CMOS	MN	TQFP	KOREA-Q	64	128	80	0	
	140C/5.5V	DCD	DPORT	CY7C131-JC	98491	9835	519810680	1K x 8	DP	CMOS	MN	PLCC	INDNS-O	52	128	46	0	
	140C/5.75	MPD	COMDTY	CY7C188-VC	98252	9829	619807917	32K x 9		CMOS	TX	SOJ	CSPI-R	32	128	48	0	
HTOL	150C/5.75	MPD	COMDTY	CY7C188-VC	98252	9829	619807917	32K x 9		CMOS	TX	SOJ	CSPI-R	32	48	1500	0	
							80	120	0									
							500	120	0									
	150C/5.75V	DCD	FIFO	CY7C4245-JC	98323	9833	619809187L	4Kx18	FIFO	CMOS	TX	PLCC	PHIL-M	68	48	1026	0	
				CY7C457-JC	98312	9833	519809904S	2Kx18	FIFO	CMOS	TX	PLCC	INDNS-O	52	48	111	0	
							48	889	0									
	150C/6.5	DCD	FIFO	CY7C425-JC	98321	9832	219805631	1Kx9	FIFO	CMOS	TX	PLCC	ALPHA-X	28	48	147	0	
							48	277	0									
							48	293	0									
							48	299	0									
				CY7C433-JC	98324	9832	219805630	4Kx9	FIFO	CMOS	TX	PLCC	ALPHA-X	32	48	286	0	
							48	357	0									
							48	357	0									
HTS	165C/NO BIAS	MPD	COMDTY	CY7C199-VC	98358		619805353	32K x 8		CMOS	MN	SOJ	PHIL-GW	28	336	50	0	
HTSSL	150C/5.75	MPD	COMDTY	CY7C188-VC	98252	9829	619807917	32K x 9		CMOS	TX	SOJ	CSPI-R	32	80	81	0	
							168	81	0									
HTSSL2	125C/5.5V	DCD	DPORT	CY7C136-JC	M80122	9742	519713305	2K x 8	DP	CMOS	MN	PLCC	INDNS-O	52	96	12	0	
							96	52	0									
							96	52	0									
							500	64	0									
					M83023	9811	519802844	2K x 8	DP	CMOS	MN	PLCC	INDNS-O	52	96	120	0	
							500	120	0									
PCT	121C/100%RH	DCD	DPORT	CY7C131-JC	98491	9835	519810680	1K x 8	DP	CMOS	MN	PLCC	INDNS-O	52	168	46	0	

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Technology	Test	Divi- Test	Func- Condition	sion tion	Device	Assembly Eval#	Pro- D/C	Wfr Lot	Pkg No	Assy Description	No cess	Dura Loc	Qty type	Qty Loc	Pin tion	Test	Fail	Fail	Mode

SRAM/LOGIC-R28	PCT	121C/100%RH	DCD	DP	PORT	CY7C136-JC	M84010	9839	519811761	2K x 8 DP	CMOS	MN	PLCC	INDNS-O	52	168	80	0	
		FIFO	CY7C4245-AC	M84021	9837	619810547	4Kx18	FIFO	CMOS	MN	TQFP	KOREA-Q	64	168	80	0			
		MPD	COMDTY	CY7C188-VC	98252	9829	619807917	32K x 9	CMOS	TX	SOJ	CSPI-R	32	96	50	0			

TC2	-65C TO 150C	DCD	DP	PORT	CY7C131-JC	98491	9835	519810680	1K x 8 DP	CMOS	MN	PLCC	INDNS-O	52	300	50	0		
		CY7C136-JC	M84011	9839	519811761	2K x 8 DP	CMOS	MN	PLCC	INDNS-O	52	300	50	0					
		FIFO	CY7C4245-AC	M84023	9837	619810547	4Kx18	FIFO	CMOS	MN	TQFP	KOREA-Q	64	300	50	0			
		MPD	COMDTY	CY7C188-VC	98252	9829	619807917	32K x 9	CMOS	TX	SOJ	CSPI-R	32	300	52	0			

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SRAM/LOGIC-R3	HTOL2	125C/5.75V	MPD	SYNC	CY7C1031-JC	M82033	9804	519800339	64K x 18	CMOS	MN	PLCC	INDNS-O	52	96	500	0	
					M82045	9804	519800339	64K x 18	CMOS	MN	PLCC	INDNS-O	52	500	120	0		
						1000	119	0	1	EOS								
						2000	119	0										
TC2	-65C TO 150C	DCD	FIFO	CY7C4271-AC	M84001	9826	619807437	32KX9	FIFO	CMOS	MN	TQFP	KOREA-Q	32	300	50	0	
				CY7C4271-JC	M84002	9819	219803518	32Kx9	FIFO	CMOS	MN	PLCC	ALPHA-X	32	300	50	0	

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Technology	Test	Divi- Test	Func- Condition	sion tion	Device	Assembly Eval#	Pro- D/C	Wfr Lot	Pkg No	Assy Description	No cess	Dura Loc	Qty type	Qty Loc	Pin tion	Test	Fail	Fail	Mode
SRAM/LOGIC-R30	PCT	121C/100%RH	MPD	SYNC	CY7C1399-VC	M82039	9740	619707822	32K x 8	CMOS	MN	TSOP	CSPI-R	28	96	47	2	1	Particle Defect/1
										Topside Crack									
										168 47 0									

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Technology	Test	Divi- Test Condition	Func- sion tion	Assembly Device	Pro- Eval#	Wfr Pkg D/C Lot No	Assy Description	No cess	Dura Loc type	Qty Loc	Qty Pin tion	Test	Fail	Fail	Mode
SRAM/LOGIC-R32	HAST	140C/3.63		MPD COMDTY CY62128-ZAC	98345	9833 619808192	128K x 8	CMOS	MN	STSO CSPI-R	32 128	50	0		
	HTS	165C/NO BIAS		MPD COMDTY CY62128-SC	98344	9821 619805763	128K x 8	CMOS	MN	SOIC TAIWAN-G	32 336	50	0		
						1000 45	0								
						619805764L	128K x 8	CMOS	MN	SOIC TAIWAN-G	32 336	50	0		
						1000 45	0								
						619805765L	128K x 8	CMOS	MN	SOIC TAIWAN-G	32 336	50	0		
						1000 45	0								
				CY62128-ZAC	98345	9833 619808192	128K x 8	CMOS	MN	STSO CSPI-R	32 336	50	0		
						1000 50	0								
	T/S	-55C TO 150C		MPD COMDTY CY62128-ZAC	98345	9833 619808192	128K x 8	CMOS	MN	STSO CSPI-R	32 100	50	0		
						200 50	0								
	TC2	-65C TO 150C		MPD COMDTY CY62128-ZAC	98345	9833 619808192	128K x 8	CMOS	MN	STSO CSPI-R	32 300	50	0		
						619808193	128K x 8	CMOS	MN	STSO CSPI-R	32 300	50	0		
						9834 619808195	128K x 8	CMOS	MN	STSO CSPI-R	32 300	50	0		

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Technology	Test	Divi- Test	Func- Condition	sion tion	Device	Assembly Eval#	Pro- D/C	Wfr Lot	Pkg No	Assy Description	No cess	Dura Loc	Qty type	Qty Loc	Pin	tion	Test	Fail	Fail	Mode
SRAM/LOGIC-R32D	HTOL	150C/5.75V	DCD	FIFO	CY7C4285-ASC	98379	9833	619809266	64Kx18	FIFO CMOS	MN	TQFP KOREA-Q	64	48	683	1	1	Void in Oxide		
						9834	619809529	64Kx18	FIFO CMOS	MN	TQFP KOREA-Q	64	48	699	0					
						619809725	64Kx18	FIFO CMOS	MN	TQFP KOREA-Q	64	48	695	0						

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Technology	Test	Divi- Test	Func- Condition	sion tion	Device	Assembly Eval#	Pro- D/C	Wfr Lot	Pkg No	Assy Description	No cess	Dura Loc	Qty type	Qty Loc	Pin	tion	Test	Fail	Fail	Mode
SRAM/LOGIC-R42	HAST	140C/5.5	MPD	COMDTY	CY62148-SC	98343	9835	619809040	512K x 8	CMOS	MN	TSOP KOREA-H	32	128	47	0	2	EOS		
HTS	165C/NO BIAS	MPD	COMDTY	CY62148-SC	98343	9835	619809040	512K x 8	CMOS	MN	TSOP KOREA-H	32	336	53	0					
								1000	53	0										
T/S	-55C TO 150C	MPD	COMDTY	CY62148-SC	98343	9835	619809040	512K x 8	CMOS	MN	TSOP KOREA-H	32	100	49	0					
								200	49	0										
TC2	-65C TO 150C	MPD	COMDTY	CY62148-SC	98343	9835	619809038	512K x 8	CMOS	MN	TSOP KOREA-H	32	300	49	0					
								619809039	512K x 8	CMOS	MN	TSOP KOREA-H	32	300	50	0				
								619809040	512K x 8	CMOS	MN	TSOP KOREA-H	32	300	50	0				

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Technology	Test	Divi- Test	Func- Condition	sion tion	Device	Assembly Eval#	Pro- D/C	Wfr Lot	Pkg No	Assy Description	No cess	Dura Loc	Qty type	Qty Loc	Pin tion	Test	Fail	Fail	Mode
SRAM/LOGIC-R42D	PCT	121C/100%RH	MPD	COMDTY	CY7C1324-AC	98234	9831	619808689	128 x 18	CMOS	MN	TQFP	CSPI-R	100	168	48	0		
					CY7C1325-AC	98081	9842	619811767	256K x 18	CMOS	MN	TQFP	CSPI-R	100	168	47	0		
TC2	-65C TO 150C	DCD	FIFO	CY7C43684V-AC	98268	9838	619810894	16Kx36x2	CMOS	MN	TQFP	KOREA-Q	128	300	48	0			
								300	48	0									
					MPD	COMDTY	CY7C1325-AC	98081	9823	619805641	256K x 18	CMOS	MN	TQFP	CSPI-R	100	300	48	0
								9829	619807575	256K x 18	CMOS	MN	TQFP	CSPI-R	100	300	48	0	
									619807576	256K x 18	CMOS	MN	TQFP	CSPI-R	100	300	48	0	
					CY7C199-VC	98424	9844	619812830	32K x 8(5)	CMOS	MN	SOJ	CSPI-R	28	300	48	0		

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Technology	Test	Divi- Test	Func- Condition	tion	Assembly Device	Pro- Eval#	Wfr D/C	Pkg Lot No	Assy Description	No cess	Dura Loc	Qty type	Qty Loc	Pin	tion	Test	Fail	Fail	Mode
SRAM/LOGIC-R42H		125C/6.5V	MPD	COMDTY	CY62128-SC	98175	9840	619811086	128K x 8	CMOS	MN	SOIC	TAIWAN-G	32	48	3435	0		
HTOL	150C/5.75	MPD	COMDTY	CY62128-ZAC	98175	9829	619807966	128K x 8	CMOS	MN	STSO	CSPI-R	32	80	1498	0			
HTOL2	125C/6.5V	MPD	COMDTY	CY62256-SNC	98434	9842	519812495	32K x 8	CMOS	MN	NSOI	INDNS-O	28	48	1172	0			
					519812496	32K x 8	CMOS	MN	NSOI	INDNS-O	28	48	944	0					
					519812497	32K x 8	CMOS	MN	NSOI	INDNS-O	28	48	1162	1	FA PENDING				
PCT	121C/100%RH	MPD	COMDTY	CY62128-ZAC	98175	9829	619807966	128K x 8	CMOS	MN	STSO	CSPI-R	32	168	49	0			
					CY62256-SNC	98434	9832	519809733/	32K x 8	CMOS	MN	NSOI	INDNS-O	28	168	51	0		
TC2	-65C TO 150C	MPD	COMDTY	CY62256-SNC	98434	9832	519809733/	32K x 8	CMOS	MN	NSOI	INDNS-O	28	300	50	0	3	EOS	

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Technology	Test	Divi- Test Condition	Func- sion tion	Assembly Device	Pro- Eval#	Wfr D/C Lot No	Pkg Description	Assy cess	No Loc	Dura type	Qty Loc	Qty Pin	tion	Test	Fail	Fail	Mode
<hr/>																	
SRAM/LOGIC-R52H	HAST	140C/3.63		MPD	COMDTY CY62128V-VC	98311	9832 619809145/ 128K x 8	CMOS	MN	SOJ	CSPI-R	32	256	51	0		
					9833 619809438/ 128K x 8		CMOS	MN	SOJ	CSPI-R	32	128	51	0			
							256	51	0								
140C/3.63V		MPD	COMDTY CY62128V-VC	98311		619806482/ 128K x 8	CMOS	MN	SOJ	CSPI-R	32	128	50	0			
							256	50	0								
					CY62128V-ZSC	98372	9828 619807177 128K x 8	CMOS	MN	STSO	CSPI-R	32	128	45	0		
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HTOL	150C/3.8	MPD	COMDTY CY62128V-VC	98311	9832 619809145/ 128K x 8	CMOS	MN	SOJ	CSPI-R	32	48	1050	0				
							80	540	0								
							500	528	0								
					9833 619809438/ 128K x 8		CMOS	MN	SOJ	CSPI-R	32	48	1050	0			
					CY62128V-ZSC	98372	9841 619811946 128K x 8	CMOS	MN	STSO	CSPI-R	32	48	1501	0		
							80	270	0								
							500	268	0								
					9842 619811945 128K x 8		CMOS	MN	STSO	CSPI-R	32	48	1504	0			
							80	270	0								
							500	268	0								
150C/3.8V		MPD	COMDTY CY62128V-VC	98311	9823 619806702/ 128K x 8	CMOS	MN	SOJ	CSPI-R	32	48	334	0				
							48	334	0								
							48	334	0								
							80	540	0								
							300	540	0								
							500	539	0	1 EOS							
					9833 619809438/ 128K x 8		CMOS	MN	SOJ	CSPI-R	32	80	540	0			
							200	540	1	1 UNKNOWN							
							500	539	0								
150C/5.75V		MPD	COMDTY CY62128V-VC	98311	9823 619806702/ 128K x 8	CMOS	MN	SOJ	CSPI-R	32	1000	539	0				
							2000	539	1	FA PENDING							
					9833 619809438/ 128K x 8		CMOS	MN	SOJ	CSPI-R	32	577	419	0			
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HTS	165C/NO BIAS	MPD	COMDTY CY62128V-VC	98311		619806447/ 128K x 8	CMOS	MN	SOJ	CSPI-R	32	336	48	0			
						619806482/ 128K x 8	CMOS	MN	SOJ	CSPI-R	32	336	50	0			

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Technology	Test	Divi- Test Condition	Func- sion tion	Assembly Device	Pro- Eval#	Wfr Pkg D/C Lot No	Assy Description	No cess	Dura Loc type	Qty Loc	Qty Pin	Test	Fail	Fail	Mode
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SRAM/LOGIC-R52H	HTS	165C/NO BIAS	MPD	COMDTY CY62128V-VC	98311	9823	619806702/ 128K x 8	CMOS	MN	SOJ	CSPI-R	32	336	50	0
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