

Cypress Semiconductor Qualification Report

**QTP# 99045 VERSION 1.0
September, 1999**

**208 Lead PQFP
ASE Taiwan**

CYPRESS TECHNICAL CONTACT FOR QUALIFICATION DATA:

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PLASTIC PACKAGE/ASSEMBLY DESCRIPTION			
Package Outline, Type, or Name:	208 lead PQFP		
Mold Compound Name/Manufacturer:	Hitachi 9200 M/L		
Lead Frame material:	Copper		
Lead Finish, composition:	Solder Plated, 85%Sn, 15%Pb		
Die Attach Area Plating:	Copper/Solder mask		
Die Attach Method:	Silver Epoxy	Die Attach Material:	Ablestik 8361
Wire Bond Method:	Thermosonic	Wire Material/Size:	1.0/1.3 mils
JESD22-A112 Moisture Sensitivity Level	MSL 3		
Assembly Line ID and Process ID:	ASE, Taiwan (TAIWAN-G)		

Note: Please contact a Cypress Representative for other packages availability.

RELIABILITY TESTS PERFORMED PER SPECIFICATION REQUIREMENTS

Stress/Test	Test Condition (Temp/Bias)	Result P/F
Temperature Cycle	JEDEC22, Condition C, -65°C to 150°C Precondition: JESD22 Moisture Sensitivity MSL 3 192 Hrs., 30°C/ 60% RH+ 3IR-Reflow, 220°C+ 5, 0°C	P
Acoustic Microscopy Test	Cypress Specification 25-00104	P
Solderability	Cypress Specification 25-00018	P
Resistance to Solvents	Cypress Specification 25-00016	P
Internal Visual	Cypress Specification 25-00017	P
External Visual	Cypress Specification 12-00292/12-00103	P
Physical Dimension	Cypress Specification 25-00031	P
Die Shear	Cypress Specification 24-00215	P
Ball Shear	Cypress Specification 24-00018	P
Bond Pull	Cypress Specification 24-00002	P
High Accelerated Saturation Test	140°C/ 5.5V/85RH Precondition: JESD22 Moisture Sensitivity MSL 3 192 Hrs., 30°C/60% RH+ 3IR-Reflow, 220°C+ 5, 0°C	P
X-Ray	MIL STD-883-2012	P
High Temperature Storage	165°C, no bias	P
Thermal Shock	Cypress Specification 25-00014	P

RELIABILITY TEST DATA

QTP#: 99045

DEVICE	ASSY-LOC	FABLOT#	ASSYLOT#	DURATION	S/S	REJ	FAIL MODE
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STRESS: ACOUSTIC MICROSCOPY							
CY37512P208-NC	TAIWN-G	9850159	619817519	PRE	15	0	
CY37512P208-NC	TAIWN-G	9850159	619817519	POST	15	0	
CY37512P208-NC	TAIWN-G	9850158	619817611	PRE	15	0	
CY37512P208-NC	TAIWN-G	9850158	619817611	POST	15	0	
CY37512P208-NC	TAIWN-G	9901171	619901312	PRE	15	0	
CY37512P208-NC	TAIWN-G	9901171	619901312	POST	15	0	

STRESS: HI-ACCEL SATURATION TEST (140C/85%RH/5.5V), PRECOND. 192 HRS 30C/60%RH							
CY37512P208-NC	TAIWN-G	9850158	619817611	S/RE-FLOW	55	0	
CY37512P208-NC	TAIWN-G	9850158	619817611	128	48	0	

STRESS:HIGH TEMP STORAGE							
CY37512P208-NC	TAIWN-G	9850158	619817611	336	50	0	

STRESS: TC COND. C, -65 TO 150C, PRECOND. 192 HRS 30C/60%RH (MSL 3)							
CY37512P208-NC	TAIWN-G	9850159	619817519	300	50	0	
CY37512P208-NC	TAIWN-G	9850158	619817611	300	48	0	
CY37512P208-NC	TAIWN-G	9850158	619817611	1000	48	0	
CY37512P208-NC	TAIWN-G	9901171	619901312	300	50	0	
CY37512P208-NC	TAIWN-G	9901171	619901312	1000	50	0	

STRESS: THERMAL SHOCK, CONDITION B 150C/-55C							
CY37512P208-NC	TAIWN-G	9850158	619817611	100	50	0	
CY37512P208-NC	TAIWN-G	9850158	619817611	200	50	0	
