

# **Cypress Semiconductor Qualification Report**

**QTP# 97302 VERSION 1.0  
October, 1997**

**100 Pins TQFP Package (14x20x1.4mm)  
ASE, Taiwan Assembly**

PLASTIC PACKAGE/ASSEMBLY DESCRIPTION			
Package Outline, Type, or Name:	100 Ld Thin Quad Flatpack (TQFP)		
Mold Compound Name/Manufacturer:	Hitachi CEL9200		
Lead Frame material:	Copper		
Lead Finish, composition:	Solder Plated, 90%Sn, 10%Pb		
Die Attach Area Plating:	None		
Die Attach Method:	Epoxy	Die Attach Material:	Ablestik 8361H
Wire Bond Method:	Thermosonic	Wire Material/Size:	Gold / 1.0 mil
JESD22-A112 Moisture Sensitivity Level	Level 3		
Assembly Line ID and Process ID:	ASE, Taiwan (TAIWAN-G)		

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

**RELIABILITY TESTS PERFORMED**

<b>Stress/Test</b>	<b>Test Condition (Temp/Bias)</b>	<b>Result P/F</b>
Temperature Cycle	MIL-STD-883C, Method 1010, Condition C, -65°C to 150°C Precondition: JESD22 Moisture Sensitivity Level 3 192 Hrs., 30°C/60%RH+ Solder Reflow	P
High Accelerated Saturation Test	140°C/5.5V Precondition: JESD22 Moisture Sensitivity Level 3 192 Hrs., 30°C/60%RH+ Solder Reflow	P
Internal Visual	Cypress Spec 25-00017	P
External Visual	Cypress Spec 12-00102/12-00103	P
Physical Dimension	Cypress Spec. 25-00031	P
Solderability, Steam Aged	Cypress Spec. 25-00018	P
Die Shear	Cypress Spec 24-00004	P
Ball Shear	Cypress Spec 24-00018	P
Bond Pull	Cypress Spec 24-00002	P
High Temperature Storage	165°C, no bias	P
Thermal Shock	Cypress Spec 25-00014	P
X-Ray	Cypress Spec 12-000149	P
Acoustic Microscopy	JEDEC A112-A	P

**RELIABILITY TEST DATA**

**QTP#: 97302**

DEVICE	ASSY-LOC	FABLOT#	ASSYLOT#	DURATION	S/S	REJ	FAIL MODE
STRESS: HI-ACCEL SATURATION TEST (140C, 5.5V), PRECOND. 192 HRS 30C/60%RH							
CY7C1329-AC	TAIWN-G	4711050	619703196LB	128	48	0	
STRESS: HIGH TEMPERATURE STORAGE (165C, NO BIAS)							
CY7C1329-AC	TAIWN-G	4711050	619703196LB	336	48	0	
STRESS: TC COND. C, -65 TO 150C, PRECOND. 192 HRS 30C/60%RH							
CY7C1329-AC	TAIWN-G	4711050	619703196LA	300	48	0	
CY7C1329-AC	TAIWN-G	4711050	619703196LA	1000	48	0	
CY7C1329-AC	TAIWN-G	4711050	619703196LB	300	45	1	1 BROKEN PINS
CY7C1329-AC	TAIWN-G	4711050	619703196LB	1000	43	0	
CY7C1329-AC	TAIWN-G	4711050	619703196LC	300	48	0	
CY7C1329-AC	TAIWN-G	4711050	619703196LC	1000	48	0	
STRESS: THERMAL SHOCK, CONDITION B							
CY7C1329-AC	TAIWN-G	4711050	619703196LB	100	48	0	
CY7C1329-AC	TAIWN-G	4711050	619703196LB	200	48	0	