

Cypress Semiconductor Qualification Report

**QTP# 97304 VERSION 1.0
August, 1997**

**48/56 Ld SSOP Package
Cypress Philippines Assembly**

PLASTIC PACKAGE/ASSEMBLY DESCRIPTION			
Package Outline, Type, or Name:	56 Ld SSOP		
Mold Compound Name/Manufacturer:	Hitachi CEL9200		
Lead Frame material:	Copper		
Lead Finish, composition:	Solder Plated, 85%Sn, 15%Pb		
Die Attach Area Plating:	Silver		
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 1		
Assembly Line ID and Process ID:	Cypress Philippines (CSPI-R)		

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

RELIABILITY TESTS PERFORMED

Stress/Test	Test Condition (Temp/Bias)	Result P/F
Temperature Cycle	MIL-STD-883C, Method 1010, Condition C, -65°C to 150°C Precondition: JESD22 Moisture Sensitivity Level 1 168 Hrs., 85°C/85%RH	P
High Accelerated Saturation Test	140°C/5.5V Precondition: JESD22 Moisture Sensitivity Level 1 168 Hrs., 85°C/85%RH	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
Thermal Shock	Cypress Spec 25-00014	P
X-Ray	Cypress Spec 12-000149	P
Acoustic Microscopy Test		P

RELIABILITY TEST DATA

QTP#: 97304

DEVICE	ASSY-LOC	FABLOT#	ASSYLOT#	DURATION	S/S	REJ	FAIL MODE
STRESS: ACOUSTIC MICROSCOPY							
CY2276APVC	CSPI-R	3716099	619704633	COMP	15	0	
STRESS: AGE BALL SHEAR							
CY2276APVC	CSPI-R	3716099	619704633	COMP	10	0	
STRESS: BOND PULL							
CY2276APVC	CSPI-R	3716099	619704633	COMP	10	0	
STRESS: PHYSICAL DIMENSIONS							
CY2276APVC	CSPI-R	3716099	619704633	COMP	5	0	
STRESS: DIE SHEAR							
CY2276APVC	CSPI-R	3716099	619704633	COMP	15	0	
STRESS: EXTERNAL VISUAL							
CY2276APVC	CSPI-R	3716099	619704633	COMP	15	0	
STRESS: HI-ACCEL SATURATION TEST (140C, 5.5V), PRECOND. 168 HRS 85C/85%RH							
CY2276APVC	CSPI-R	3716099	619704633	128	45	0	
STRESS: HIGH TEMPERATURE STORAGE (165C, NO BIAS)							
CY2276APVC	CSPI-R	3716099	619704633	336	45	0	
STRESS: INTERNAL VISUAL							
CY2276APVC	CSPI-R	3716099	619704633	COMP	5	0	
STRESS: SOLDERABILITY							
CY2276APVC	CSPI-R	3716099	619704633	COMP	3	0	
STRESS: TC COND. C, -65 TO 150C, PRECOND. 168 HRS 85C/85%RH							
CY2276APVC	CSPI-R	3716099	619704633	300	45	0	
CY2276APVC	CSPI-R	3716099	619704633	300	45	0	
CY2276APVC	CSPI-R	3716099	619704633	300	45	0	
STRESS: THERMAL SHOCK, CONDITION B							
CY2276APVC	CSPI-R	3716099	619704633	100	45	0	
CY2276APVC	CSPI-R	3716099	619704633	200	45	0	
STRESS: X-RAY							
CY2276APVC	CSPI-R	3716099	619704633	COMP	15	0	