

Cypress Semiconductor Qualification Report

**QTP# 98107 VERSION 1.0
June, 1998**

**32 Ld STSOP Package
Cypress Philippines Assembly**

PLASTIC PACKAGE/ASSEMBLY DESCRIPTION			
Package Outline, Type, or Name:		32 Ld STSOP	
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 1 192 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 (C-SAM)	Cypress Spec 25-000104	P

RELIABILITY TEST DATA

QTP#: 98107

DEVICE	ASSY-LOC	FABLOT#	ASSYLOT#	DURATION	S/S	REJ	FAIL MODE
STRESS: AGE BALL SHEAR							
CY62128-ZAC	CSPI-R	4746103	619802494	COMP	10	0	
STRESS: BOND PULL							
CY62128-ZAC	CSPI-R	4746103	619802494	COMP	10	0	
STRESS: C-SAM							
CY62128-ZAC	CSPI-R	4746103	619802494	COMP	15	0	
CY62128-ZAC	CSPI-R	4751464	619802528	COMP	15	0	
CY62128-ZAC	CSPI-R	4751474	619802568	COMP	15	0	
STRESS: MOISTURE RESISTANCE							
CY62128-ZAC	CSPI-R	4746103	619802494	COMP	5	0	
STRESS: DIE SHEAR							
CY62128-ZAC	CSPI-R	4746103	619802494	COMP	15	0	
STRESS: EXTERNAL VISUAL							
CY62128-ZAC	CSPI-R	4746103	619802494	COMP	15	0	
STRESS: HI-ACCEL SATURATION TEST (140C, 5.5V), PRECOND. 168 HRS 85C/85%RH							
CY62128-ZAC	CSPI-R	4746103	619802494	128	45	0	
STRESS: HIGH TEMPERATURE STORAGE (165C, NO BIAS)							
CY62128-ZAC	CSPI-R	4746103	619802494	336	45	0	
STRESS: INTERNAL VISUAL							
CY62128-ZAC	CSPI-R	4746103	619802494	COMP	5	0	
STRESS: SOLDERABILITY							
CY62128-ZAC	CSPI-R	4746103	619802494	COMP	3	0	
STRESS: TC COND. C, -65 TO 150C, PRECOND. 168 HRS 85C/85%RH (MSL 1)							
CY62128-ZAC	CSPI-R	4746103	619802494	300	45	0	
CY62128-ZAC	CSPI-R	4746103	619802494	1000	45	0	
CY62128-ZAC	CSPI-R	4751464	619802528	300	45	0	
CY62128-ZAC	CSPI-R	4751474	619802568	300	45	0	
CY62128-ZAC	CSPI-R	4751474	619802568	1000	45	0	
STRESS: THERMAL SHOCK, CONDITION B							
CY62128-ZAC	CSPI-R	4746103	619802494	100	45	0	
CY62128-ZAC	CSPI-R	4746103	619802494	200	45	0	
STRESS: X-RAY							
CY62128-ZAC	CSPI-R	4746103	619802494	COMP	15	0	
CY62128-ZAC	CSPI-R	4751464	619802528	COMP	15	0	