

Cypress Semiconductor Qualification Report

QTP# 98223 VERSION 1.0
July, 1998

32 Ld, 300-mil SOJ Package
(Sumitomo EME-7351 Molding Compound)
Cypress Philippines Assembly

PLASTIC PACKAGE/ASSEMBLY DESCRIPTION			
Package Outline, Type, or Name:	32 Ld, 300-mil SOJ		
Mold Compound Name/Manufacturer:	Sumitomo EME 7351		
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 3		
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 3 168 Hrs., 30°C/60%RH	P
High Accelerated Saturation Test	140°C/5.5V Precondition: JESD22 Moisture Sensitivity Level 3 192 Hrs., 30°C/60%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#: 98223

DEVICE	ASSY-LOC	FABLOT#	ASSYLOT#	DURATION	S/S	REJ	FAIL MODE
STRESS: HI-ACCEL SATURATION TEST (140C, 5.5V), PRECOND. 168 HRS 85C/85%RH							
CY7C1009-VC	CSPI-R	4742827	619710919	128	45	0	
STRESS: HIGH TEMPERATURE STORAGE (165C, NO BIAS)							
CY7C1009-VC	CSPI-R	4742827	619710919	336	45	0	
STRESS: TC COND. C, -65 TO 150C, PRECOND. 168 HRS 85C/85%RH (MSL 1)							
CY7C1009-VC	CSPI-R	4742827	619710919	300	45	0	
CY7C1009-VC	CSPI-R	4742817	619710920	300	45	0	
CY7C1009-VC	CSPI-R	4742844	619710921	300	45	0	
STRESS: THERMAL SHOCK, CONDITION B							
CY7C1009-VC	CSPI-R	4742827	619710919	100	45	0	
CY7C1009-VC	CSPI-R	4742827	619710919	200	45	0	