

# **Cypress Semiconductor Qualification Report**

**QTP# 98108, Version 1.0  
July, 1998**

**28 Ld, 209 mil SSOP Package  
Anam, Philippines Assembly**

**CYPRESS TECHNICAL CONTACT FOR QUALIFICATION DATA:**

Marc Hartranft  
Reliability Manager  
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PLASTIC PACKAGE/ASSEMBLY DESCRIPTION			
Package Outline, Type, or Name:	28 Ld, 209 mil SSOP (die size <=.106" x .138")		
Mold Compound Name/Manufacturer:	Shinetsu KMC-184		
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 84-1LMISR4
Wire Bond Method:	Thermosonic	Wire Material/Size:	Gold / 1.0 mil
JESD22-A112 Moisture Sensitivity Level	Level 1		
Assembly Line ID and Process ID:	Anam, Philippines (PHIL-M)		

**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
High Temperature Storage	165°C, no bias	P
Internal Visual	Cypress Spec 25-00017	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	Cypress Spec 25-000104	P

**RELIABILITY TEST DATA**

**QTP#: 98108**

DEVICE	ASSY-LOC	FABLOT#	ASSYLOT#	DURATION	S/S	REJ	FAIL MODE
<b>STRESS: HI-ACCEL SATURATION TEST (140C, 3.63V), PRECOND. 168 HRS 85C/85%RH</b>							
CY2310NZPVC	PHIL-M	3804201	349800519	128	47	0	
<b>STRESS: HIGH TEMPERATURE STORAGE (165C, NO BIAS)</b>							
CY2310NZPVC	PHIL-M	3804201	349800519	336	47	0	
CY2310NZPVC	PHIL-M	3804201	349800519	500	47	0	
<b>STRESS: TC COND. C, -65 TO 150C, PRECOND. 168 HRS 85C/85%RH (MSL 1)</b>							
CY2310NZPVC	PHIL-M	3804201	349800519	300	47	0	
CY2310NZPVC	PHIL-M	3804201	349800520	300	47	0	
CY2310NZPVC	PHIL-M	3804201	349800521	300	47	0	
<b>STRESS: THERMAL SHOCK, CONDITION B</b>							
CY2310NZPVC	PHIL-M	3804201	349800519	100	47	0	
CY2310NZPVC	PHIL-M	3804201	349800519	200	47	0	