

Cypress Semiconductor Qualification Report

**QTP# 97098 VERSION 1.0
April, 1997**

**28 Ld Thin Small Outline Package (TSOP)
Anam, Philippines**

PLASTIC PACKAGE/ASSEMBLY DESCRIPTION			
Package Outline, Type, or Name:	28 Ld TSOP (paddle size less than or equal 209mil x 276 mil)		
Mold Compound Name/Manufacturer:	Sumitomo EME 7351		
Lead Frame material:	Copper		
Lead Finish, composition:	Solder Plated, 90%Sn, 10%Pb		
Die Attach Area Plating:	Silver Spot		
Die Attach Method:	Epoxy	Die Attach Material:	Ablestik 8361
Wire Bond Method:	Thermosonic	Wire Material/Size:	Gold / 1.3 mil
JESD22-A112 Moisture Sensitivity Level	Level 3 (Test results met level 1 moisture but required to ship with dry packed condition)		
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
High Accelerated Saturation Test (HAST)	140°C, 85%RH, 5.5V Precondition: JESD22 Moisture Sensitivity Level 1 168 Hrs., 85°C/85%RH	P
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
Acoustic Microscopy		P
X-Ray	MIL-STD-883 - 2012; Cypress Spec 12-000149	P
Ball Shear	Cypress Spec 24-00018	P

RELIABILITY TEST DATA

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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							
CY7C199-ZC	PHIL-M	4628725	349700963-1	128	43	0	
STRESS: TC COND. C, -65 TO 150C, PRECOND. 168 HRS 85C/85%RH							
CY7C199-ZC	PHIL-M	4628725	349700963-1	300	48	0	
CY7C199-ZC	PHIL-M	4628725	349700963-2	300	48	0	
CY7C199-ZC	PHIL-M	4628725	349700963-2	1000	48	0	
CY7C199-ZC	PHIL-M	4628725	349700963-3	300	47	0	
CY7C199-ZC	PHIL-M	4628725	349700963-3	1000	47	0	