

# **Cypress Semiconductor Qualification Report**

**QTP# 99302 VERSION 1.0  
November, 1999**

**32L Small Thin Small Outline Package  
Sumitomo 7351 Molding Compound  
Cypress Philippines**

**CYPRESS TECHNICAL CONTACT FOR QUALIFICATION DATA:**

Ed Russell  
Reliability Director  
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<b>PLASTIC PACKAGE/ASSEMBLY/MARK DESCRIPTION</b>			
Package Outline, Type, or Name:		32L STSOP (with die size of 183.9 X 207.1 mils or less)	
Mold Compound Name/Manufacturer:		Sumitomo 7351LS 14.3 x 4.5 GMS	
Mold Compound Tg, °C:	125 Deg C	D/C Material if used:	No
Lead Frame material:	Copper, C7025 Doughnut Design (Etched LF FROM HERAEUS)		
Lead Finish, composition:	Solder Plate, 85%-95% tin		
Die Attach Area Plating:	copper	Die Attach Pad Size:	202 x 250
Die Attach Method:	Epoxy	Die Attach Material:	8361H Ablestik
Wire Bond Method:	Thermosonic	Wire Material/Size:	Au 1.3 mil Wire
For Mark Quals, Ink Type/Manufacturer If laser mark write in 'LASER'	Laser		
Assembly Line Process Flow:	11-20007 rev***		
Name/Location of All Assembly Facilities by Pkg.:	Cypress Philippines (CSPI-R)		
Name/Location of All Marking Sites:	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/3.63V Precondition: JESD22 Moisture Sensitivity Level 1 168 Hrs., 85°C/85%RH	P
Pressure Cooker Test, MSL3 to MSL1	No bias, 121C 100%RH, 30 PSI A. Precondition: JESD22 Moisture Sensitivity Level 1 168 Hrs., 85°C/85%RH	P
C-SAM	Cypress Spec. 25-00104	P

RELIABILITY TEST DATA

QTP#: 99302

DEVICE	ASSY-LOC	FABLOT#	ASSYLOT#	DURATION	S/S	REJ	FAIL MODE
STRESS: C-SAM							
CY62128-ZAC	CSPI-R	4815620	619808192	COMP	15	0	
CY62128-ZAC	CSPI-R	4815620	619808193	COMP	15	0	
CY62128-ZAC	CSPI-R	4815640	619808195	COMP	15	0	
STRESS: HI-ACCEL SATURATION TEST (140C/85%RH/x.xv), PRECOND. 168 HRS 85C/85%RH							
CY62128-ZAC	CSPI-R	4815620	619808192	128	49	0	
STRESS: PRESSURE COOKER TEST, MSL 1 (121C, 100%RH)							
CY62128V-ZAIB	CSPI-R	4917343	619921794	168	50	0	
STRESS: TC COND. C, -65 TO 150C, PRECOND. 168 HRS 85C/85%RH (MSL 1)							
CY62128-ZAC	CSPI-R	4815620	619808192	300	50	0	
CY62128-ZAC	CSPI-R	4815620	619808193	300	50	0	
CY62128-ZAC	CSPI-R	4815640	619808195	300	50	0	
CY62128V-ZAIB	CSPI-R	4848705	619906905	300	15	0	
CY62128V-ZAIB	CSPI-R	4848766	619906918	300	15	0	
CY62128V-ZAIB	CSPI-R	4848766	619907024	300	15	0	
CY62128V-ZAIB	CSPI-R	4850918	619907025	300	15	0	
CY62128V-ZAIB	CSPI-R	4850918	619907216	300	15	0	
CY62128V-ZAIB	CSPI-R	4850918	619907217	300	15	0	
CY62128V-ZAIB	CSPI-R	4850918	619907218	300	15	0	
CY62128V-ZAIB	CSPI-R	4851025	619909463	300	15	0	
CY62128V-ZAIB	CSPI-R	4908162	619916931	300	15	0	
CY62128V-ZAIB	CSPI-R	4910424	619917084	300	15	0	