Cypress Semiconductor
Package Qualification Report

QTP# 99346 VERSION 1.0
March, 2000

235° C Reflow Profile
100-pin TQFP (≤14 x 14 x 1 mm)
Anam, Korea

CYPRESS TECHNICAL CONTACT FOR QUALIFICATION DATA:

Ed Russell
Reliability Director
(408) 432-7069

PLASTIC PACKAGE/ASSEMBLY/MARK DESCRIPTION			
Package Outline, Type, or Name:	≤100pin TQFP (≤14 x 14 x 1mm)		
Mold Compound Name/Manufacturer:	Sumitomo 7320 (Qual Vehicle) All qualified Molding Compound		
Mold Compound Tg, C:	145C		
Lead Frame material:	Copper		
Lead Finish, composition:	Solder Plated, 85% - 95% Tin		
Die Attach Area Plating:	Ag plating	Die Attach Pad Size:	Various
Die Attach Method:	Epoxy	Die Attach Material:	8361H Ablestik
Wire Bond Method:	Thermosonic	Wire Material/Size:	1.0,1.25 or 1.3 mil Al or Au wire
For Mark Quals, Ink Type/Manufacturer If Laser Mark write in LASER	Laser /Ink		
Name/Location of All Assembly Facilities by Pkg.:	Anam, Korea (Qual. Vehicle) All Cypress Assembly Sites		

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	130°C/5.5V Precondition: J-STD-020A Moisture Sensitivity Level 3 192 Hrs., 30°C/60%RH	P
High Accelerated Saturation Test	130°C/5.5V Precondition: J-STD-020A Moisture Sensitivity Level 5 DB+72 Hrs., 30°C/60%RH	P
Temperature Cycle	MIL-STD-883C, Method 1010, Condition C, -65°C to 150°C Precondition: J-STD-020A, Moisture Sensitivity Level 3 192 Hrs., 30C/60%	P
Temperature Cycle	MIL-STD-883C, Method 1010, Condition C, -65°C to 150°C Precondition: J-STD-020A, Moisture Sensitivity Level 5 DB+72 Hrs., 30C/60%	P
Acoustic Microscopy	Cypress Spec. 25-00104	P

RELIABILITY TEST DATA

QTP#: 99346

DEVICE	ASSY-LOC	FABLOT#	ASSYLOT#	DURATION	S/S	REJ	FAIL MODE
STRESS: HI-ACCEL SATURATION TEST (130C/85%RH/5.5V), PRECOND. 192 HRS 30C/60%RH							
CY7C4205V-ASC	KOREA-Q	3808790	619803478	128	50	0	
CY7C4271-AC	KOREA-Q	4809164	619817576	128	50	0	
STRESS: HI-ACCEL SATURATION TEST(130C/85%RH/5.5V) PRECOND. DB+72 HRS 30C/60%RH							
CY7C0251-AC	KOREA-Q	2915837	619914903	128	48	0	
CY7C0251-AC	KOREA-Q	2920330	619919457	128	48	0	
STRESS: TC COND. C, -65 TO 150C, PRECOND. 192 HRS 30C/60%RH (MSL 3)							
CY7C4205V-ASC	KOREA-Q	3808790	619803478	300	49	0	
CY7C4205V-ASC	KOREA-Q	3808790	619803478	500	49	0	
CY7C4205V-ASC	KOREA-Q	3808790	619803478	1000	49	0	
CY7C4271-AC	KOREA-Q	4809164	619817576	300	50	0	
CY7C4271-AC	KOREA-Q	4809164	619817576	500	50	0	
CY7C4271-AC	KOREA-Q	4809164	619817576	1000	50	0	
STRESS: TC COND. C, -65 TO 150C, PRECOND. 72 HRS 30/60%RH (MSL 5)							
CY7C0251-AC	KOREA-Q	2920330	619919457	300	50	0	
CY7C0251-AC	KOREA-Q	2920330	619919457	500	50	0	
CY7C0251-AC	KOREA-Q	2920330	619919457	1000	50	0	