

Qualification Report

February 1997, QTP #96247, Version 1.0

Alphatec Assembly

32 Lead PLCC (without die coat)
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PLASTIC PACKAGE/ASSEMBLY DESCRIPTION	
Package Outline, Type, or Name:	32 Lead PLCC
Mold Compound Name/Manufacturer:	Sumitomo EME-6300H
Lead Frame material:	Olin 151
Lead Finish, composition:	Solder Plated, 85%Sn, 15% Pb
Die Attach Area Plating:	Silver Spot
Die Attach Method:	Silver Epoxy
Wire Bond Method:	Thermosonic
Die Attach Material:	Ablestik
Wire Material/Size:	Gold /1.3 mils
Name/Location of Assembly (prime) facility:	Alphatec, Thailand



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
Physical Dimention	Cypress Spec. 25-00031	P
Resistance to Solvents	Cypress Spec. 25-00016	P
Solderability, Steam Aged	Cypress Spec. 25-00018	P
Internal Visual	Cypress Spec. 25-00017	P
Exteranl Visual	Cypress Spec. 12-00102/12-00103	P
Thermal Shock	Cypress Spec. 25-00014	P
High Temp Storage	165°C, no bias	P



CYPRESS
 SEMICONDUCTOR
 Alphatec Assembly for 32Ld PLCC - QTP #96247, V. 1.0

RELIABILITY TEST DATA

QTP#: 96247

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							
CY27C256-JC	ALPHA-X	2614663	219608422	128	48	0	
CY27C256-JC	ALPHA-X	2614663	219608423	128	48	0	
STRESS: HIGH TEMPERATURE STORAGE (165C, NO BIAS)							
CY27C256-JC	ALPHA-X	2614663	219608422	336	48	0	
CY27C256-JC	ALPHA-X	2614663	219608422	1000	48	0	
STRESS: TC COND. C, -65 TO 150C, PRECOND. 168 HRS 85C/85%RH							
CY27C256-JC	ALPHA-X	2614663	219608422	300	48	0	
CY27C256-JC	ALPHA-X	2614663	219608422	1000	48	0	
CY27C256-JC	ALPHA-X	2614663	219608423	300	48	0	
CY27C256-JC	ALPHA-X	2614663	219608423	1000	48	0	
STRESS: THERMAL SHOCK, CONDITION B							
CY27C256-JC	ALPHA-X	2614663	219608422	100	48	0	
CY27C256-JC	ALPHA-X	2614663	219608422	200	48	0	