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Continuity of document content

The fact that Infineon offers the following product as part of the Infineon product portfolio does not lead to any changes to this document. Future revisions will occur when appropriate, and any changes will be set out on the document history page.

Continuity of ordering part numbers

Infineon continues to support existing part numbers. Please continue to use the ordering part numbers listed in the datasheet for ordering.

Cypress Semiconductor Package Qualification Report

QTP# 063001 VERSION*A
January 2015

48-Ball Fine Pitch Ball Grid Array (FBGA)

MSL3, Pb-Free, 260°C Reflow

ASE Taiwan (TAIWAN-G)

FOR ANY QUESTIONS ON THIS REPORT, PLEASE CONTACT
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PACKAGE QUALIFICATION HISTORY

Qual Report	Description of Qualification Purpose	Date Comp
063001	Qualify ASE-Taiwan using Sn (98.5%)/Ag (1.0%)/Cu (0.5%) Solder Ball Composition (6x8x1.0mm, 8x9.5x1.0mm, 6x6x1.0mm, 5x5x1.0mm) VFBGA	Jul 06

MAJOR PACKAGE INFORMATION USED IN THIS QUALIFICATION

Package Designation:	BZ48
Package Outline, Type, or Name:	48-Ball FBGA (6 x 8 x 1.0m) Fine Pitch Ball Grid Array
Mold Compound Name/Manufacturer:	Kyocera KE-G2270
Mold Compound Flammability Rating:	V-O per UL94
Oxygen Rating Index:	>28%
Substrate Material:	BT Resin
Lead Finish, Composition / Thickness:	Sn (98.5%), Ag (1%), Cu (0.5%)
Die Backside Preparation Method/Metallization:	Backgrind
Die Separation Method:	Wafer Saw
Die Attach Supplier:	Ablestik
Die Attach Material:	Ablestik 2025
Die Attach Method:	Epoxy
Bond Diagram Designation:	Not Applicable
Wire Bond Method:	Thermosonic
Wire Material/Size:	Au, 1.0mil
Thermal Resistance Theta JA °C/W:	35.85°C/W
Package Cross Section Yes/No:	N/A
Assembly Process Flow:	Not Applicable
Name/Location of Assembly (prime) facility:	ASE Taiwan (Taiwan-G)

ELECTRICAL TEST / FINISH DESCRIPTION

Test Location:	Cypress Philippines (CML-R)
Fault Coverage:	100%

RELIABILITY TESTS PERFORMED PER SPECIFICATION REQUIREMENTS

Stress/Test	Test Condition (Temp/Bias)	Result P/F
High Accelerated Saturation	130°C, 3.6V, 85%RH Precondition: JESD22 Moisture Sensitivity MSL3 192 Hrs., 30°C/60%RH+3IR-Reflow, 260°C+0, -5°C	P
Pressure Cooker	121C, 100%RH, 15 Psig Precondition: JESD22 Moisture Sensitivity MSL3 192 Hrs., 30°C/60%RH+3IR-Reflow, 260°C+0, -5°C	P
Drop Test	JESD22-B111	P
Cross Section	Criteria: Meet external and internal characteristics of Cypress package	P
External Visual	MIL-PRF-38535, MIL-STD-883, METHOD 2009	P



Reliability Test Data

QTP #: 063001

Device	Fab Lot #	Assy Lot #	Assy Loc	Duration	Samp	Rej	Failure Mechanism
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STRESS: DROP TEST

CY62167DV30L (7C62167D)	4309094	610316588	TAIWN -G	COMP	15	0	
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STRESS: EXTERNAL VISUAL

CY62167DV30L (7C62167D)	4309094	610316588	TAIWN -G	COMP	15	0	
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STRESS: PRESSURE COOKER TEST (121C, 100%RH), 15 Psig, PRE COND 192 HR 30C/60%RH, MSL3

CY62167DV30L (7C62167D)	4309094	610316588	TAIWN -G	168	40	0	
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STRESS: HI-ACCEL SATURATION TEST (130C, 85%RH, 3.6V), PRE COND 192 HR 30C/60%RH, MSL3

CY62167DV30L (7C62167D)	4309094	610316588	TAIWN -G	128	44	0	
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Document History Page

Document Title: QTP No. 063001 : 48-Ball FBGA, MSL3, Pb-Free, 260C Reflow, ASE Taiwan
Document Number: 001-85273

Rev.	ECN No.	Orig. of Change	Description of Change
**	3840039	HLR	Initial Spec Release.
*A	4613007	HSTO	Align qualification report based on the new template in the front page Update the test conditions and reference standards/criteria for External Visual

Distribution: WEB

Posting: None