

Package Qualification Report

Reliability By Design

Qualification Description:

The information contained herein represents proof of Reliability and Performance of the Package Series listed below in accordance with the Qualification Plan and test methods referenced in Section 7.0, after exposure to a variety of environments and mechanical events that occur during installation and operational lifetime of the product. Upon conclusion of the testing the product continued to operate within specification limits, demonstrating its capability of reliable operation throughout its lifetime.

The purpose of this report is to present Qualification Test results of the referenced Package Series. The Pericom product data presented in this report qualifies the products manufactured in this package configuration, using the same bill of materials and assembled by the identified subcontractor location. The report describes the qualification test program, procedures utilized, criteria enforced (at the time of product validation), and specific result data obtained during the testing of three lots of semiconductors. The three lots consist of an equal number of units from different date codes, from the same production line and SubContractor to ensure manufacturing repeatability.

Lot Background Information:

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Qual Part Number:	PI5A3158ZAE	Qual Test Date:	Dec-2008 update Jan-2012
Supplier (Code):	SPEL (X)	Die Attach Material:	Ablestik 8006NS
Pkg Type - Code:	TDFN-12 (ZA12)	Wire Size & Material:	1.0 mil Gold
Outline Drawing:	PD-2009	Mold Compound:	CEL9220ZHF 10L
By Extension Pkg:	ZA8	Leadframe Material:	Copper
		Lead Finish:	PPF

Pericom's Qualification Test Results:

Stress Test	Test Procedure	Test Conditions	Duration	# of Lots	Samples per Lot	Results Pass/Fail
Preconditioning	JESD22-A113	MSL1	NA	3	200	200 / 0
CSAM	J-STD-020	No delamination of Die Top, Wire bond, Down bond areas	NA	3	22	22 / 0
PreCon UHAST	JESD22-A118	130°C, RH 85%, 33.3 psia, 0V	168 hrs	3	100	100 / 0
PreCon Temp Cycle	JESD22-A104	-65°C to +150°C 500 Cycles	100 cycles	3	100	100 / 0
		-65°C to +150°C 500 Cycles	500 cycles	3	100	100 / 0
Physical Dimension	JESD22-B100	Per Datasheeet	NA	3	5	5/0
External Visual Insp	JESD22-B101	NA	NA	3	5	5/0
Solderability	J-STD-020 JESD22-B102	Pb-Free Solder Dip 245°C	NA	3	5	5/0

Qualification by Extension Information:

Where a product of interest is not sampled during this period, it is valid to use the reliability data of the particular process technology or package type family to which the part belongs. All parts within the same family are designed to the same rules, and manufacturing is controlled by SPC. Within a product family, a device can only be fabricated on one process technology/ option, and only assembled on one package type process.

If there are any questions about this qualification, please contact Quality Support at:

customerquestion@pericom.com



Date:	Dec-2008 update Jan-2012	
PKG Type & Code:	TDFN-12 (ZA12)	
Assembler-Code:	SPEL (X)	
Qual Device:	PI5A3158ZAE	

By extension: Pericom active devices using the Fab/Process at the time of the Qualification:

PI3A121ZAEX		
PI5A3157ZA		
PI5A3157ZAEX		
PI5A3157ZAX		
PI5A3158BZAEX		
PI5A3158ZA		
PI5A3158ZA+AUX		
PI5A3158ZAE+AUX		
PI5A3158ZAEX		
PI5A3158ZAX		
PI5USB14566AZAEX		
PI5USB14566ZAEX		
PI5USB1457AZAEX		
PI5USB1457ZAEX		
PI6C22402ZAEX		

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Lot Background Information:

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Qual Part Number:	PI5A3158ZAE	Qual Test Date:	May-2002 update Jan-2012
Supplier (Code):	UTL (Z)	Die Attach Material:	Ablestik 8006
Pkg Type - Code:	TDFN-12 (ZA12)	Wire Size & Material:	1.0 mil Gold
Outline Drawing:	PD-2009	Mold Compound:	EME G770L
By Extension Pkg:	ZA6	Leadframe Material:	Copper
		Lead Finish:	PPF

Pericom's Qualification Test Results:

Stress Test	Test Procedure	Test Conditions	Duration	# of Lots	Samples per Lot	Results Pass/Fail
Preconditioning	JESD22-A113	MSL1	NA	3	200	200 / 0
CSAM	J-STD-020	No delamination of Die Top, Wire bond, Down bond areas	NA	3	22	22 / 0
PreCon UHAST	JESD22-A118	130°C, RH 85%, 33.3 psia, 0V	168 hrs	3	100	100 / 0
PreCon Temp Cycle	JESD22-A104	-65°C to +150°C 500 Cycles	100 cycles	3	100	100 / 0
		-65°C to +150°C 500 Cycles	500 cycles	3	100	100 / 0
Physical Dimension	JESD22-B100	Per Datasheeet	NA	3	5	5/0
External Visual Insp	JESD22-B101	NA	NA	3	5	5/0
Solderability	J-STD-020 JESD22-B102	Pb-Free Solder Dip 245°C	NA	3	5	5/0

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Date:	May-2002 update Jan-2012
PKG Type & Code:	TDFN-12 (ZA12)
Assembler-Code:	UTL (Z)
Qual Device:	PI5A3158ZAE

By extension: Pericom active devices using the Fab/Process at the time of the Qualification:

PI3A121ZAEX			
PI5A3157ZA			
PI5A3157ZAEX			
PI5A3157ZAX			
PI5A3158BZAEX			
PI5A3158ZA			
PI5A3158ZA+AUX			
PI5A3158ZAE+AUX			
PI5A3158ZAEX			
PI5A3158ZAX			
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