

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:

Qual Part Number:	PI6C182AHE
Supplier (Code):	GTK (G)
Pkg Type - Code:	SSOP-28 (H28)
Outline Drawing:	PD-1250
By Extension Pkg:	H20

Qual Test Date:	May-2009 updated Nov-2012
Die Attach Material:	1076DJ-G
Wire Size & Material:	1.0 mil Gold
Mold Compound:	G700LY
Leadframe Material:	Copper
Lead Finish:	100% Matte Sn

Date Codes: B0910GC, B0911GC, B0912GC

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	100	100 / 0
CSAM	J-STD-020	No delamination of Die Top, Wire bond, Down bond areas	NA	3	5	5 / 0
PreCon UHASt	JESD22-A118	130°C, RH 85%, 33.3 psia, 0V	96 hrs	3	50	50 / 0
PreCon Temp Cycle	JESD22-A104	-65°C to +150°C 500 Cycles	100 cycles	3	50	50 / 0
		-65°C to +150°C 500 Cycles	500 cycles	3	50	50 / 0
Physical Dimension	JESD22-B100	Per Datasheet	NA	3	5	5 / 0
External Visual Insp	JESD22-B101	NA	NA	3	5	5 / 0
Terminal Strength	JESD22-B105	90° Bends, 2 bend min.	NA	3	5	5 / 0
Solderability	J-STD-020	Pb-Free Solder Dip 245°C	NA	3	5	5 / 0
	JESD22-B102					

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: May-2009 updated Nov-2012
 PKG Type & Code: SSOP-28 (H28)
 Assembler-Code: GTK (G)
 Qual Device: PI6C182AHE

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

PI2EQX3211AHE	PI6C182BHE		
PI2EQX3211AHEX	PI6C182BHEX		
PI2EQX3211BHE	PI6C182HE		
PI2EQX3211BHEX	PI6C182HEX		
PI2EQX3211CHE	PI6C184HE		
PI2EQX3211CHEX	PI6C184HEX		
PI49FCT20807HE	PI6C20400HE		
PI49FCT20807HEX	PI6C20400HEX		
PI49FCT32805HE	PI6C20400SHE		
PI49FCT32805HEX	PI6C20400SHEX		
PI49FCT32807HE	PI74LPT244AHE		
PI49FCT32807HEX	PI74LPT244AHEX		
PI49FCT38052CHE	PS396CAIE		
PI49FCT38052CHEX	PS396CAIEX		
PI49FCT38053CHE			
PI49FCT38053CHEX			
PI49FCT3805AHE			
PI49FCT3805AHEX			
PI49FCT3805BHE			
PI49FCT3805BHEX			
PI49FCT3806AHE			
PI49FCT3806AHEX			
PI49FCT3806HE			
PI49FCT3806HEX			
PI49FCT3807AHE			
PI49FCT3807AHEX			
PI49FCT3807BHE			
PI49FCT3807BHEX			
PI49FCT805ATHE			
PI49FCT805ATHEX			
PI49FCT805CTHE			
PI49FCT805CTHEX			
PI49FCT807ATHE			
PI49FCT807ATHEX			
PI49FCT807CTHE			
PI49FCT807CTHEX			
PI6C103HE			
PI6C103HEX			
PI6C10807HE			
PI6C10807HEX			
PI6C10810HE			
PI6C10810HEX			
PI6C182AHE			
PI6C182AHEX			



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Lot Background Information:

Qual Part Number:	Generic - Real Die
Supplier (Code):	OSE (O)
Pkg Type - Code:	SSOP-20 (H20)
Outline Drawing:	PD-1240
By Extension Pkg:	none

Qual Test Date:	Sep-2009
Die Attach Material:	Hitachi EN4900G
Wire Size & Material:	1.0 mil Gold
Mold Compound:	Hitachi CEL9220HF
Leadframe Material:	Copper
Lead Finish:	100% Matte Sn

Date Codes:

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	1	135	135 / 0
CSAM	J-STD-020	No delamination of Die Top, Wire bond, Down bond areas	NA	1	20	20 / 0
PreCon UHAST	JESD22-A118	130°C, RH 85%, 33.3 psia, 0V	96 hrs	1	45	45 / 0
Autoclave	JESD22-A1	121°C, RH 100%, 29.7psig, 0V	168 hrs	1	45	45 / 0
PreCon Temp Cycle	JESD22-A104	-65°C to +150°C 500 Cycles	100 cycles	1	45	45 / 0
		-65°C to +150°C 500 Cycles	500 cycles	1	45	45 / 0
HTSL (no PreCon)	JESD22-A103	1000hrs, 0V, 150°C	500 hrs	1	45	45 / 0
		1000hrs, 0V, 150°C	1000 hrs	1	45	45 / 0
Physical Dimension	JESD22-B100	Per Datasheet	NA	3	5	5 / 0
External Visual Insp	JESD22-B101	NA	NA	3	5	5 / 0
Terminal Strength	JESD22-B105	90° Bends, 2 bend min.	NA	3	5	5 / 0
Solderability	J-STD-020	Pb-Free Solder Dip 245°C	NA	3	5	5 / 0
	JESD22-B102					

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