



Package Qualification Report

Reliability By Design

Qualification Description:

QBE: L28, L24, L20, L16, L14, L08, H20, H28, Q24

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 Vehicle:	PI74AVC164245AAE
Supplier (Code):	GTK (G)
Pkg Type - Code:	TSSOP-48 (A48)
Outline Drawing:	PD-1501
By Extension Pkg:	L28 L24 L20 L16 L14 L08 H20 H28 Q16 Q20 Q24 W08 W14 W16

Qual Test Date:	Dec-2011 updated Nov-2014
Die Attach Material:	1076DJ-G
Wire Size & Material:	0.8 mil PdCu
Mold Compound:	G700LY
Leadframe Material:	Copper
Lead Finish:	100% Matte Sn

Date Codes: 1129GC 1130GC 1131GC

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	154	462 / 0
CSAM	J-STD-020	No delamination of Die Top, Wire bond, Down bond areas	NA	3	22	66 / 0
PreCon UHAST	JESD22-A118	130°C, RH 85%, 33.3 psia, 0V	96 hrs	3	77	231 / 0
PreCon B-HAST	JESD22-A110	130°C, RH 85%, 33.3psia, 3.6V	192 hrs	3	38	114 / 0
PreCon Temp Cycle	JESD22-A104	-65°C to +150°C 500 Cycles	100 cycles	3	77	231 / 0
		-65°C to +150°C 500 Cycles	500 cycles	3	77	231 / 0
HTSL (no PreCon)	JESD22-A103	1000hrs, 0V, 150°C	500 hrs	3	77	231 / 0
		1000hrs, 0V, 150°C	1000 hrs	3	77	231 / 0
Wire Strength, IMG		After 1000 hours HTSL	NA	3	2	6 / 0
Splash, Cratering		After Wire bonding	NA	3	3	9 / 0
Physical Dimension	JESD22-B100	Per Datasheet	NA	3	5	15 / 0
External Visual Insp	JESD22-B101	NA	NA	3	5	15 / 0
Terminal Strength	JESD22-B105	90° Bends, 2 bend min.	NA	3	5	15 / 0
Solderability	J-STD-020	Pb-Free Solder Dip 245°C	NA	3	5	15 / 0
	JESD22-B102					

Qualificaton 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

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Date: **Dec-2011 updated Nov-2014**

PKG Type & Code: **TSSOP-48 (A48) QBE: L28, L24, L20, L16, L14, L08, H20, H28, Q24, Q20, Q16, W16, W14, W08**

Assembler-Code: **GTK (G)**

Qual Vehicle: **PI74AVC164245AAE**

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

A48	L08	L08	L16	L16
PI3DBV40AE	PI3C3305LE	PT7C43390LE	PI3CH360LE	PI6C2409-1HLE
PI3DBV40AEX	PI3C3305LE+CT	PT7C43390LEX	PI3CH360LE+DF	PI6C2409-1HLE+DC
PI3L301DAE	PI3C3305LE+CTX	PT7C4372ALE	PI3CH360LE+DFX	PI6C2409-1HLE+DCX
PI3L301DAEX	PI3C3305LEX	PT7C4372ALEX	PI3CH360LEX	PI6C2409-1HLEX
PI3USB40AE	PI3C3306LE	PT7C4563LE	PI3CH400LE	PI6C490086LE
PI3USB40AEX	PI3C3306LE+CT	PT7C4563LEX	PI3CH400LEX	PI6C490086LEX
PI5C16210AE	PI3C3306LE+CTX		PI3CH401LE	PI6C490094LE
PI5C16210AEX	PI3C3306LEX		PI3CH401LEX	PI6C490094LEX
PI5C16245AE	PI3CH200LE		PI3CH480LE	PI6C490094LIE
PI5C16245AEX	PI3CH200LE+DF		PI3CH480LE+DF	PI6C490094LIEX
PI5C16861AE	PI3CH200LE+DFX		PI3CH480LE+DFX	PI6C490097LE
PI5C16861AEX	PI3CH200LEX	L14	PI3CH480LEX	PI6C490097LEX
PI6C20800BAE	PI3VT3306LE	PI3B3126LE	PI3L110LE	PI6C490098LE
PI6C20800BAEX	PI3VT3306LEX	PI3B3126LEX	PI3L110LEX	PI6C490098LEX
PI6C20800BIAE	PI5C3305LE	PI3C3125LE	PI3USB14-ALE	PI6C4931502-04LIE
PI6C20800BIAEX	PI5C3305LEX	PI3C3125LE	PI3USB14-ALEX	PI6C4931502-04LIEX
PI6C20800SAE	PI5C3306LE	PI3C3125LE+CT	PI3USB14LE	PI6C557-03ALE
PI6C20800SAEX	PI5C3306LEX	PI3C3125LE+CTX	PI3USB14LEX	PI6C557-03ALEX
PI6C20800SIAE	PI6C2405A-1HLE	PI3C3125LEX	PI3USB20LE	PI6C557-03BLE
PI6C20800SIAEX	PI6C2405A-1HLEX	PI3C3126LE	PI3USB20LEX	PI6C557-03BLEX
PI6C49003AE	PI6C2405A-1HLIE	PI3C3126LE+CT	PI3V312LE	PI6C557-03LE
PI6C49003AEX	PI6C2405A-1HLIEX	PI3C3126LE+CTX	PI3V312LEX	PI6C557-03LEX
PI6C49005AIE	PI6C2405A-1LE	PI3C3126LEX	PI49FCT20802LE	PI6C557-10LE
PI6C49005AIEX	PI6C2405A-1LEX	PI3CH400LE+DF	PI49FCT20802LEX	PI6C557-10LEX
PI6C49006AE	PI6CV2304LE	PI3CH400LE+DFX	PI49FCT20803LE	PI6LC48H02LIE
PI6C49006AEX	PI6CV2304LEX	PI3CH401LE+DF	PI49FCT20803LEX	PI6LC48H02LIEX
PI6C49019AIE	PI6CV304LE	PI3CH401LE+DFX	PI49FCT32802LE	PI90LV031ALE
PI6C49019AIEX	PI6CV304LEX		PI49FCT32802LEX	PI90LV031ALEX
PI6C49053AIE	PI6LC48C21LE		PI49FCT32803LE	PI90LV032ALE
PI6C49053AIEX	PI6LC48C21LEX		PI49FCT32803LEX	PI90LV032ALEX
PI74AVC164245AAE	PI6LC48C21LIE	L16	PI49FCT3802LE	PI90LV047ALE
PI74AVC164245AAEX	PI6LC48C21LIEX	PI3B3251LE	PI49FCT3802LEX	PI90LV047ALEX
PI74AVC164245AE	PI6LC48P21LE	PI3B3251LE+CU	PI49FCT3803LE	PI90LV048ALE
PI74AVC164245AEX	PI6LC48P21LEX	PI3B3251LE+CUX	PI49FCT3803LEX	PI90LV048ALEX
PI74AVC164245LAAE	PI6LC48P21LIE	PI3B3251LEX	PI5C3253LE	PI90LV048ALE
PI74AVC164245LAAEX	PI6LC48P21LIEX	PI3B3253LE	PI5C3253LEX	PI90LV048ALEX
	PI6LC48P25104LE	PI3B3253LE+CU	PI5C3257LE	
	PI6LC48P25104LEX	PI3B3253LE+CUX	PI5C3257LEX	
	PI6LC48P25104LIE	PI3B3253LEX	PI5L200LE	
	PI6LC48P25104LIEX	PI3B3257LE	PI5L200LEX	
	PT7C43190LE	PI3B3257LE+CU	PI6C10806BLE	
	PT7C43190LEX	PI3B3257LE+CUX	PI6C10806BLEX	
	PT7C4337LE	PI3B3257LEX	PI6C22409P-1HLE	
	PT7C4337LEX		PI6C22409P-1HLEX	

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 Assembler-Code: **GTK (G)**
 Qual Vehicle: **PI74AVC164245AAE**

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

L20	L20	L24	L24	H20
PI3B3244LE	PI6C4911505-07LIE	PI3B3384LE	PT8A3353ALE	PI2EQX3211BHE
PI3B3244LE+CU	PI6C4911505-07LIE X	PI3B3384LEX	PT8A3353ALE X	PI2EQX3211BHE X
PI3B3244LE+CUX	PI6C4911505LIE	PI3B3861LE	PT8A3355ALE	PI49FCT20807HE
PI3B3244LEX	PI6C4911505LIE X	PI3B3861LEX	PT8A3355ALE X	PI49FCT20807HE X
PI3B3245LE	PI6C4931504-04LIE	PI3CH1000LE	PT8A3362LE	PI49FCT32807HE
PI3B3245LE+CU	PI6C4931504-04LIE X	PI3CH1000LEX	PT8A3362LEX	PI49FCT32807HE X
PI3B3245LE+CUX	PI6C557-05BLE	PI3CH1010LE	PT8A3382ALE	PI49FCT38052CHE
PI3B3245LEX	PI6C557-05BLE X	PI3CH1010LEX	PT8A3382ALE X	PI49FCT38052CHE X
PI3C3245LE	PI6C557-05LE	PI5C3384LE	PT8A3384ALE	PI49FCT3805AHE
PI3C3245LE+CT	PI6C557-05LEX	PI5C3384LEX	PT8A3384ALE X	PI49FCT3805AHE X
PI3C3245LE+CTX	PI6C557-05QLE	PI6C2410LE		PI49FCT3805BHE
PI3C3245LEX	PI6C557-05QLE X	PI6C2410LE		PI49FCT3805BHE X
PI3CH3244LE	PI6CEQ20200LE	PI6C2509-133LE		PI49FCT3805CHE
PI3CH3244LEX	PI6CEQ20200LEX	PI6C2509-133LEX		PI49FCT3805CHE X
PI3CH3345LE	PI6CEQ20200LIE	PI6C2510-133ELE		PI49FCT3805DHE
PI3CH3345LEX	PI6CEQ20200LIE X	PI6C2510-133ELE X		PI49FCT3805DHE X
PI3CH800LE	PI6CEQ20400LE	PI6C4911506-06LIE		PI49FCT38072BHE
PI3CH800LE	PI6CEQ20400LEX	PI6C4911506-06LIE X		PI49FCT38072BHE X
PI3CH800LE+DF	PI6CX201ALE	PI6C4921506LIE		PI49FCT3807AHE
PI3CH800LE+DFX	PI6CX201ALE X	PI6C4921506LIE X	L28	PI49FCT3807AHE X
PI3CH800LEX	PI6LC48L0201LIE	PI6CV847LE	PI6C20400ALE	PI49FCT3807CHE
PI3CH800LEX	PI6LC48L0201LIE X	PI6CV847LEX	PI6C20400ALE X	PI49FCT3807CHE X
PI3VT3245-ALE	PI6LC48P0201LE	PI6LC48P0301LE	PI6C20400BLE	PI49FCT3807DHE
PI3VT3245-ALEX	PI6LC48P0201LEX	PI6LC48P0301LEX	PI6C20400BLE X	PI49FCT3807DHE X
PI5C3245LE	PI6LC48P0201LIE	PI6LC48P0301LIE	PI6C20400LE	PI49FCT3807HE
PI5C3245LEX	PI6LC48P0201LIE X	PI6LC48P0301LIE X	PI6C20400LE X	PI49FCT3807HE X
PI6C10810LE	PI6LC48P02LIE	PI6LC48P03LE	PI6C20400SLE	PI6C10807HE
PI6C10810LEX	PI6LC48P02LIE X	PI6LC48P03LEX	PI6C20400SLE X	PI6C10807HE X
PI6C41204LE		PI6LC48P03LIE	PI6C49014LIE	PI6C10810HE
PI6C41204LEX		PI6LC48P03LIE X	PI6C49014LIE X	PI6C10810HE X
PI6C48533-01LE		PI6LC48P0401LE	PI6C49015LIE	PI74LPT244AHE
PI6C48533-01LEX		PI6LC48P0401LEX	PI6C49015LIE X	PI74LPT244AHE X
PI6C48535-01BLIE		PI6LC48P0401LIE	PI7C9X1172BLE	
PI6C48535-01BLIE X		PI6LC48P0401LIE X	PI7C9X1172BLE X	
PI6C48535-01LE		PI7C9X1170ABLE	PI7C9X762BLE	
PI6C48535-01LEX		PI7C9X1170ABLE X	PI7C9X762BLE X	
PI6C48543LE		PI7C9X760ABLE		
PI6C48543LEX		PI7C9X760ABLE X		
PI6C48545LE		PS8A0382ALE		
PI6C48545LEX		PS8A0382ALE X		
PI6C4911504-03LIE		PS8A0384ALE		
PI6C4911504-03LIE X		PS8A0384ALE X		
PI6C4911505-04LIE		PT8A3351ALE		
PI6C4911505-04LIE X		PT8A3351ALE X		

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 Assembler-Code: **GTK (G)**
 Qual Vehicle: **PI74AVC164245AAE**

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

H28	Q16	Q16	Q20	Q20
PI6C20400AHE	PI3B3125QE	PI49FCT20802QE	PI3B3244QE	PI49FCT3807CQEX
PI6C20400AHEX	PI3B3125QE+CU	PI49FCT20802QEX	PI3B3244QE+CU	PI49FCT3807DQE
PI6C20400BHE	PI3B3125QE+CUX	PI49FCT32802QE	PI3B3244QEX	PI49FCT3807DQEX
PI6C20400BHEX	PI3B3125QEX	PI49FCT32802QEX	PI3B3245QE	PI49FCT3807QE
PI6C20400HE	PI3B3126QE	PI49FCT32803QE	PI3B3245QE+CU	PI49FCT3807QEX
PI6C20400HEX	PI3B3126QE+CU	PI49FCT32803QEX	PI3B3245QE+CUX	PI5C3245QE
PI6C20400SHE	PI3B3126QE+CUX	PI49FCT3802QE	PI3B3245QEX	PI5C3245QEX
PI6C20400SHEX	PI3B3126QEX	PI49FCT3802QEX	PI3C3245QE	PI5USB266QE
PT8A9000HE	PI3B3251QE	PI5A100QE	PI3C3245QE+CT	PI5USB266QEX
	PI3B3251QE+CU	PI5A100QEX	PI3C3245QE+CTX	PI6C10810QE
	PI3B3251QE+CUX	PI5A392AQE	PI3C3245QEX	PI6C10810QEX
	PI3B3251QEX	PI5A392AQEX	PI3CH800QE	
	PI3B3253QE	PI5C3125QE	PI3CH800QE+DF	
	PI3B3253QE+CU	PI5C3125QEX	PI3CH800QE+DFX	
	PI3B3253QE+CUX	PI5C3126QE	PI3CH800QEX	
	PI3B3253QEX	PI5C3126QEX	PI3VT3245-AQE	
	PI3B3257AQE	PI5C3251QE	PI3VT3245-AQEX	
	PI3B3257AQEX	PI5C3251QEX	PI49FCT20807QE	
	PI3B3257QE	PI5C3253QE	PI49FCT20807QEX	
	PI3B3257QE+CU	PI5C3253QEX	PI49FCT32805QE	
	PI3B3257QE+CUX	PI5C3257QE	PI49FCT32805QEX	
	PI3B3257QEX	PI5C3257QEX	PI49FCT32807QE	
	PI3C3126QE	PI5L100QE	PI49FCT32807QEX	
	PI3C3126QE+CT	PI5L100QEX	PI49FCT3805AQE	
	PI3C3126QE+CTX	PI5L200QE	PI49FCT3805AQEX	
	PI3C3126QEX	PI5L200QEX	PI49FCT3805BQE	
	PI3CH281QE	PI5V330AQE	PI49FCT3805BQEX	
	PI3CH281QE+DF	PI5V330AQEX	PI49FCT3805CQE	
	PI3CH281QE+DFX	PI5V330QE	PI49FCT3805CQEX	
	PI3CH281QEX	PI5V330QEX	PI49FCT3805DQE	
	PI3CH480QE	PI5V330SQE	PI49FCT3805DQEX	
	PI3CH480QE+DF	PI5V330SQE+CS	PI49FCT3805QE	
	PI3CH480QE+DFX	PI5V330SQE+CSX	PI49FCT3805QEX	
	PI3CH480QEX	PI5V330SQEX	PI49FCT38072CQE	
	PI3L100QE	PI5V331QE	PI49FCT38072CQEX	
	PI3L100QEX	PI5V331QEX	PI49FCT3807AQE	
	PI3L110QE	PI6C557-03BQE	PI49FCT3807AQEX	
	PI3L110QEX	PI6C557-03BQEX	PI49FCT3807BQE	
	PI3USB14-AQE	PI6ULS5V9627AQE	PI49FCT3807BQE+AM	
	PI3USB14-AQEX	PI6ULS5V9627AQEX	PI49FCT3807BQE+AMX	
	PI3USB14QE		PI49FCT3807BQEX	
	PI3USB14QEX		PI49FCT3807CQE	
	PI3V312QE			
	PI3V312QEX			

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 Assembler-Code: **GTK (G)**
 Qual Vehicle: **PI74AVC164245AAE**

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

Q24	W08	W08	W08	W16
PI3B3384QE	PI5PD2065WEX	PI90LV027AWEX	PT7C4512WEX	PI3B3253WE+CU
PI3B3384QE+CU	PI5PD2069WEX	PI90LV028AWE	PT7V41283-A1WE	PI3B3257WE
PI3B3384QE+CUX	PI5USB68AWE	PI90LV028AWEX	PT7V41283-A1WEX	PI3B3257WE+CU
PI3B3384QEX	PI5USB68AWEX	PI90LV179WE	PT8A2511WE	PI3B3257WE+CUX
PI3B3861QE	PI5USB68WE	PI90LV179WEX	PT8A2541WE	PI3B3257WEX
PI3B3861QE	PI5USB68WEX	PI90LV9637WE	PT8A2541WEX	PI5A100WE
PI3B3861QE+CU	PI6C10804WE	PI90LV9637WEX	PT8A2542WE	PI5A100WEX
PI3B3861QE+CUX	PI6C10804WEX	PI90LVB010WE	PT8A2542WEX	PI5C3253WE
PI3B3861QEX	PI6C18551WE	PI90LVB010WEX	PT8A2544WE	PI5C3253WEX
PI3B3861QEX	PI6C18551WEX	PS323ESAE	PT8A2544WEX	PI5C3257WE
PI3C3384QE	PI6C2402WE	PS323ESAEX	PT8A2545WE	PI5C3257WEX
PI3C3384QE	PI6C2402WEX	PT7A7511WEX	PT8A2545WEX	PI5L200WE
PI3C3384QE+CT	PI6C2405A-1HWE	PT7A7512WEX	PT8A3514AWE	PI5L200WEX
PI3C3384QE+CTX	PI6C2405A-1HWEX	PT7A7513WE	PT8A3514AWEX	PI5V330SWE
PI3C3384QEX	PI6C2405A-1HWIE	PT7A7513WEX		PI5V330SWEX
PI3C3384QEX	PI6C2405A-1HWIE	PT7A7514WEX		PI5V330WE
PI3C3861-AQE	PI6C2405A-1WE	PT7A7515WEX		PI5V330WEX
PI3C3861-AQE	PI6C2405A-1WEX	PT7A7534WE		PI6C2408-2WE
PI3C3861-AQE+CT	PI6C4511WE	PT7A7534WEX		PI6C2408-2WEX
PI3C3861-AQE+CTX	PI6C4511WEX	PT7A7535WE		PI6C2408-3WE
PI3C3861-AQEX	PI6C485311WE	PT7A7535WEX	W14	PI6C2408-3WEX
PI3C3861-AQEX	PI6C485311WEX	PT7C4302WE	PI3B3125WE	PI6C2409-1HWE
PI3CH1012QE	PI6C49X0201WIE	PT7C4302WEX	PI3B3125WE	PI6C2409-1HWEX
PI3CH1012QEX	PI6C49X0201WIE	PT7C4307WE	PI3B3125WE+CU	PI6C2409-1HWIE
PI3V512QE	PI6C49X0202WIE	PT7C4307WEX	PI3B3125WE+CUX	PI6C2409-1HWIE
PI3V512QEX	PI6C49X0202WIE	PT7C4311WE	PI3B3125WEX	PI90LV031AWE
PI5C3384QE	PI6C49X0204B-AWE	PT7C4311WEX	PI3B3125WEX	PI90LV031AWEX
PI5C3384QEX	PI6C49X0204B-AWEX	PT7C43190WE	PI3B3126WE+CU	PI90LV032AWE
PI5C3861QE	PI6CL10804WE	PT7C43190WEX	PI3B3126WE+CUX	PI90LV032AWEX
PI5C3861QEX	PI6CL10804WEX	PT7C4337AWE	PI3C3125WE	PS391ESEE
	PI6CV2304WE	PT7C4337AWEX	PI3C3125WE	PS391ESEE
	PI6CV2304WEX	PT7C4337WE	PI3C3125WE+CT	PS398CSEE
	PI6CV304WE	PT7C4337WEX	PI3C3125WE+CTX	PS398CSEEX
	PI6CV304WEX	PT7C433833WE	PI3C3125WEX	PT8A2611WEX
	PI6ULS5V9306WE	PT7C433833WEX	PI3C3125WEX	PT8A262WE
	PI6ULS5V9306WEX	PT7C43390WE	PS4066ACSDE	PT8A262WEX
	PI6ULS5V9509WE	PT7C43390WEX	PS4066ACSDEX	PT8A263WE
	PI6ULS5V9509WEX	PT7C4363WE		PT8A263WEX
	PI6ULS5V9515AWEX	PT7C4363WEX		
	PI6ULS5V9517AWE	PT7C4372AWE		
	PI6ULS5V9517AWEX	PT7C4372AWEX		
	PI90LV017AWE	PT7C4511WE		
	PI90LV017AWEX	PT7C4511WEX		
	PI90LV027AWE	PT7C4512WE		

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Qualification Description:

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Lot Background Information:

Qual Part Number:	PI74AVC164245AAE
Supplier (Code):	OSE (O)
Pkg Type - Code:	TSSOP-48 (A48)
Outline Drawing:	PD-1501
By Extension Pkg:	L16 L20 L24 H20 L08

Qual Test Date:	Dec-2011 updated Nov-2015
Die Attach Material:	1076WA
Wire Size & Material:	0.8 mil PdCu
Mold Compound:	G631
Leadframe Material:	Copper
Lead Finish:	100% Matte Sn

Date Codes: Y11250C Y11260C Y11270C

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	154	462 / 0
CSAM	J-STD-020	No delamination of Die Top, Wire bond, Down bond areas	NA	3	22	66 / 0
PreCon uHAST	JESD22-A118	130°C, RH 85%, 33.3 psia, 0V	96 hrs	3	77	231 / 0
PreCon BHAST	JESD22-A110	130°C, RH 85%, 33.3 psia, 3.6V	96 hrs	3	77	231 / 0
		130°C, RH 85%, 33.3 psia, 3.6V	192 hrs	3	38	114 / 0
PreCon Temp Cycle	JESD22-A104	-65°C to +150°C 500 Cycles	100 cycles	3	77	231 / 0
		-65°C to +150°C 500 Cycles	500 cycles	3	77	231 / 0
HTSL (no PreCon)	JESD22-A103	1000hrs, 0V, 150°C	500 hrs	3	77	231 / 0
		1000hrs, 0V, 150°C	1000 hrs	3	77	231 / 0
Wire Strength, IMG		After 1000 hours HTSL	NA	3	2	6 / 0
Splash, Cratering		After Wire bonding	NA	3	3	9 / 0
Physical Dimension	JESD22-B100	Per Datasheet	NA	3	5	15 / 0
External Visual Insp	JESD22-B101	NA	NA	3	5	15 / 0
Solderability	J-STD-020	Pb-Free Solder Dip 245°C	NA	3	5	15 / 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: **Dec-2011 updated Nov-2015**

PKG Type & Code: **TSSOP-48 (A48)** QBE: L16 L20 L24 H20 L08

Assembler-Code: **OSE (O)**

Qual Device: **PI74AVC164245AAE**

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

A48	A48	A48	L16	L20
PI3B16209AE	PI74ALVCHR162245AE	PI74SSTV16857A+AV	PI6C490094LEX	PI6C48535-01BLIE
PI3B16209AE	PI74ALVCHR162245AEX	PI74SSTV16857A+AVX	PI6C490094LIE	PI6C48535-01BLIEX
PI3B16209AEX	PI74ALVTC16244AE	PI74SSTV16857AE	PI6C490094LIE	PI6C48535-11BLIE
PI3B16209AEX	PI74ALVTC16244AEX	PI74SSTV16857AEX	PI6C490097LE	PI6C48535-11BLIEX
PI3B16244AE	PI74ALVTC16245AE		PI6C490097LEX	PI6C4911504-03LIE
PI3B16244AE	PI74ALVTC16245AEX		PI6C490098LE	PI6C4911504-03LIEX
PI3B16244AEX	PI74AVC164245AAE		PI6C490098LEX	PI6C4911505-04LIE
PI3B16244AEX	PI74AVC164245AAE		PI6C4931502-04LIE	PI6C4911505-04LIEX
PI3B16245AE	PI74AVC164245AAE		PI6C4931502-04LIEX	PI6C4911505-07LIE
PI3B16245AEX	PI74AVC164245AAE		PI6C557-03ALE	PI6C4911505-07LIEX
PI3DBV40AE	PI74AVC164245AAEX		PI6C557-03ALEX	PI6C4911505LIE
PI3DBV40AE+CH	PI74AVC164245AAEX		PI6C557-03BLE	PI6C4911505LIEX
PI3DBV40AE+CHX	PI74AVC164245AAEX		PI6C557-03BLEX	PI6C4931504-04LIE
PI3DBV40AEX	PI74AVC164245AAEX		PI6C557-03LE	PI6C4931504-04LIEX
PI3L301DA+CH	PI74AVC164245AE	L16	PI6C557-03LEX	PI6C557-05BLE
PI3L301DA+CHX	PI74AVC164245AE	PI3B3253LE	PI6C557-10LE	PI6C557-05BLEX
PI3L301DAE	PI74AVC164245AE	PI3B3253LEX	PI6C557-10LEX	PI6C557-05LE
PI3L301DAE+CH	PI74AVC164245AE	PI3B3257LE	PI6LC48H02LIE	PI6C557-05LEX
PI3L301DAE+CHX	PI74AVC164245AEX	PI3B3257LEX	PI6LC48H02LIEX	PI6C557-05QLE
PI3L301DAEX	PI74AVC164245AEX	PI3CH360LE+DF		PI6C557-05QLEX
PI3USB40AE	PI74AVC164245AEX	PI3CH360LE+DFX		PI6CX201ALE
PI3USB40AEX	PI74AVC164245AEX	PI3CH480LE+DF		PI6CX201ALEX
PI5C16210AE	PI74AVC164245LAAE	PI3CH480LE+DFX		PI6LC48L0201LIE
PI5C16210AEX	PI74AVC164245LAAE	PI3USB14LE		PI6LC48L0201LIEX
PI5C16245AE	PI74AVC164245LAAEX	PI3USB14LEX		PI6LC48P0201LE
PI5C16245AEX	PI74AVC164245LAAEX	PI3USB20LE		PI6LC48P0201LEX
PI5C16861AE	PI74FCT162245ATAE	PI3USB20LEX		PI6LC48P0201LIE
PI5C16861AEX	PI74FCT162245ATAEX	PI49FCT3802LE		PI6LC48P0201LIEX
PI6C20800BAE	PI74FCT16244ATAE	PI49FCT3802LEX		PI6LC48P02LIE
PI6C20800BAEX	PI74FCT16244ATAEX	PI5C3253LE	L20	PI6LC48P02LIEX
PI6C20800BIAE	PI74FCT16244TAE	PI5C3253LEX	PI3CH3244LE	
PI6C20800BIAEX	PI74FCT16244TAE	PI5C3257LE	PI3CH3244LEX	
PI6C20800SAE	PI74FCT16245ATAE	PI5C3257LEX	PI3CH3345LE	
PI6C20800SAEX	PI74FCT16245ATAEX	PI5L200LE	PI3CH3345LEX	
PI6C20800SIAE	PI74FCT16245TAE	PI5L200LEX	PI3CH800LE	
PI6C20800SIAEX	PI74FCT16245TAE	PI6C10806BLE	PI3CH800LE+DF	
PI6C49003AE	PI74LCX16244AE	PI6C10806BLEX	PI3CH800LE+DFX	
PI6C49003AEX	PI74LCX16244AEX	PI6C22409P-1HLE	PI3CH800LEX	
PI6CV857AE	PI74LPT16244AE	PI6C22409P-1HLEX	PI6C10810LE	
PI6CV857AEX	PI74LPT16244AEX	PI6C490086LE	PI6C10810LEX	
PI6CVF857AE	PI74LPT16244CAE	PI6C490086LEX	PI6C41204LE	
PI6CVF857AEX	PI74LPT16244CAEX	PI6C490094LE	PI6C41204LEX	

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Date: **Dec-2011 updated Nov-2015**

PKG Type & Code: **TSSOP-48 (A48)** QBE: L16 L20 L24 H20 L08

Assembler-Code: **OSE (O)**

Qual Device: **PI74AVC164245AAE**

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

L24	H20	L08		
PI3CH1000LE+DF	PI49FCT3805DHEX	PI5C3306LEGX		
PI3CH1000LE+DFX	PI49FCT38072BHE	PI5C3306LEX		
PI3CH1010LE+DF	PI49FCT38072BHEX	PI5C3306LEX		
PI3CH1010LE+DFX	PI49FCT3807AHE	PI6C22405-1HLIE		
PI6C4911506-06LIE	PI49FCT3807AHEX	PI6C22405-1HLIEX		
PI6C4911506-06LIEX	PI49FCT3807CHE	PI6C2405A-1HLE		
PI6C4921506LIE	PI49FCT3807CHEX	PI6C2405A-1HLEX		
PI6C4921506LIEX	PI49FCT3807DHE	PI6C2405A-1HLIE		
PI6LC48P0301LE	PI49FCT3807DHEX	PI6C2405A-1HLIEX		
PI6LC48P0301LEX	PI49FCT3807HE	PI6C2405A-1LE		
PI6LC48P0301LIE	PI49FCT3807HEX	PI6C2405A-1LEX		
PI6LC48P0301LIEX	PI6C10807HE	PI6C2405A-1LIE		
PI6LC48P03LE	PI6C10807HEX	PI6C2405A-1LIEX		
PI6LC48P03LEX	PI6C10810HE	PI6CV2304LE		
PI6LC48P03LIE	PI6C10810HEX	PI6CV2304LEX		
PI6LC48P03LIEX		PI6CV304LE		
		PI6CV304LEX		
		PI6LC48C21LE		
		PI6LC48C21LEX		
		PI6LC48C21LIE		
		PI6LC48C21LIEX		
		PI6LC48C51LE		
		PI6LC48C51LEX		
		PI6LC48C51LIE		
		PI6LC48C51LIEX		
	L08	PI6LC48P0101LIE		
H20	PI3C3305LE	PI6LC48P0101LIEX		
PI2EQX3211BHE	PI3C3305LEX	PI6LC48P21LE		
PI2EQX3211BHEX	PI3C3306LE	PI6LC48P21LEX		
PI49FCT20807HE	PI3C3306LEX	PI6LC48P21LIE		
PI49FCT20807HEX	PI3CH200LE	PI6LC48P21LIEX		
PI49FCT32807HE	PI3CH200LEX	PI6LC48P25104LE		
PI49FCT32807HEX	PI3VT3306LE	PI6LC48P25104LEX		
PI49FCT38052CHE	PI3VT3306LEG	PI6LC48P25104LIE		
PI49FCT38052CHEX	PI3VT3306LEGX	PI6LC48P25104LIEX		
PI49FCT3805AHE	PI3VT3306LEX			
PI49FCT3805AHEX	PI5C3305LE			
PI49FCT3805BHE	PI5C3305LEG			
PI49FCT3805BHEX	PI5C3305LEGX			
PI49FCT3805CHE	PI5C3305LEX			
PI49FCT3805CHEX	PI5C3306LE			
PI49FCT3805DHE	PI5C3306LEG			

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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 Vehicle:	PI5C3257LE, PI3CH480LE
Supplier (Code):	CJE (J)
Pkg Type - Code:	TSSOP16 (L16)
Outline Drawing:	PD-0068
By Extension Pkg:	L14, L8

Qual Test Date:	Apr-2012, updated Jul-2014
Die Attach Material:	EN-4900GC
Wire Size & Material:	0.8 mil PdCu
Mold Compound:	CEL-1702HF9CJ
Leadframe Material:	Copper (A194)
Lead Finish:	100% matte tin (Sn)
Date Codes:	BZCXJC

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	253	759 / 0
CSAM	J-STD-020	No delamination of Die Top, Wire bond, Down bond areas	NA	3	22	66 / 0
PreCon Autoclave	JESD22-A102	121°C, RH 100%, 29.7 psia, 0V	96 hrs	3	77	231 / 0
PreCon BHAST	JESD22-A110	130C, 85% RH, 33.3 psia (230kPa), Vmax	96 hrs	3	77	231 / 0
		130C, 85% RH, 33.3 psia (230kPa), Vmax	192 hrs	3	77	231 / 0
PreCon Temp Cycle	JESD22-A104	-65°C to +150°C	100 cycles	3	77	231 / 0
		-65°C to +150°C	500 cycles	3	77	231 / 0
HTSL (no PreCon)	JESD22-A103	1000hrs, 0V, 150°C	500 hrs	3	77	231 / 0
		1000hrs, 0V, 150°C	1000 hrs	3	77	231 / 0
Physical Dimension	JESD22-B100	Per Datasheet	NA	3	5	15 / 0
External Visual Insp	JESD22-B101	NA	NA	3	5	5 / 0
Solderability	J-STD-020	Pb-Free Solder Dip 245°C	NA	3	5	15 / 0
	JESD22-B102					

Qualificaton 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: Apr-2012, updated Jul-2014

Subject: Pericom Package Qualification Report

Qual Vehicle: PI5C3257LE, PI3CH480LE - CJE

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

PT7C43190LE				
PT7C4337LE				
PT7C43390LE				
PT7C4563LE				
PI3C3306LE				
PI3C3305LE				
PI3CH200LE				
PI5C3305LE				
PI5C3306LE				
PI3VT3306LE				
PT7C4372ALE				
PI3C3125LE				
PI3B3125LE				
PI3C3126LE				
PI3C3125LE				
PI3CH401LE				
PI3CH400LE				
PI6LC5011-01LE				
PI6LC5011-01LIE				
PI6LC5011-02LE				
PI6LC5011-02LIE				
PI3B3251LE				
PI3B3253LE				
PI3B3257LE				
PI3CH480LE				
PI3CH360LE				
PI5C3257LE				

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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:	PI5C3257QE
Supplier (Code):	CJE (J)
Pkg Type - Code:	QSOP16 (Q16)
Outline Drawing:	PD-1201
By Extension Pkg:	U10, U08

Qual Test Date:	Apr-2012 Updated Apr-2013
Die Attach Material:	Ablestik 8290
Wire Size & Material:	0.8 mil PdCu
Mold Compound:	EME G600FB
Leadframe Material:	Copper
Lead Finish:	100% matte tin (Sn)
Date Codes	ZCXJG

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	253	759 / 0
CSAM	J-STD-020	No delamination of Die Top, Wire bond, Down bond areas	NA	3	22	66 / 0
PreCon Autoclave	JESD22-A102	121°C, RH 100%, 29.7 psia, 0V	96 hrs	3	77	231 / 0
PreCon BHAST	JESD22-A110	121°C, RH 100%, 29.7 psia, Vmax	96 hrs	3	77	231 / 0
			168hrs	3	77	231 / 0
			192 hrs	3	77	231 / 0
PreCon Temp Cycle	JESD22-A104	-65°C to +150°C	100 cycles	3	77	231 / 0
		-65°C to +150°C	500 cycles	3	77	231 / 0
HTSL (no PreCon)	JESD22-A103	1000hrs, 0V, 150°C	500 hrs	3	77	231 / 0
		1000hrs, 0V, 150°C	1000 hrs	3	77	231 / 0
Physical Dimension	JESD22-B100	Per Datasheet	NA	3	5	15 / 0
External Visual Insp	JESD22-B101	NA	NA	3	5	15 / 0
Solderability	J-STD-020 JESD22-B102	Pb-Free Solder Dip 245°C	NA	3	5	15 / 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: **Apr-2012 Updated Apr-2013**
 Subject: **Pericom Package Qualification Report**
 Qual Device: **PI5C3257QE - CJE**

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

PI3B3125QE				
PI3B3126QE				
PI3B3251QE				
PI3B3253QE				
PI3B3257QE				
PI3L100QE				
PI3C3126QE				
PI3C3125QE				
PI3CH480QE				
PI3CH281QE				
PI6ULS5V9627AQE				
PI5C3126QE				
PI5C3125QE				
PI5V331QE				
PI5V330QE				
PI5C3253QE				
PI5C3257QE				
PT7C4337UE				
PT7C4563UE				
PI4ULS5V102UE				
PI6ULS5V9509UE				
PI3C3306UE				
PI3C3305UE				
PT7C433833UE				
PI6ULS5V9517AUE				
PT7C4337UE				
PI4ULS5V202UE				
PI6ULS5V9515AUE				
PI6ULS5V9617AUE				
PI5C3309UE				
PI3CH3305UE				
PI5A23159UE				
PT7M6709OUE				
PT7M6714CUE				

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 Vehicle:	PI3CH480LE
Supplier (Code):	NFME (K)
Pkg Type - Code:	TSSOP-16 (L16)
Outline Drawing:	PD-1310
By Extension Pkg:	L14 L08

Qual Test Date:	Sep-2014
Die Attach Material:	8200T
Wire Size & Material:	0.8mil PdCu
Mold Compound:	CEL 9210HFVL
Leadframe Material:	Copper
Lead Finish:	Matte Sn

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	154	528 / 0
CSAM	J-STD-020	No delamination of Die Top, Wire bond, Down bond areas	NA	3	22	66 / 0
PreCon UHAST	JESD22-A118	130°C, RH 85%, 33.3 psia, 0V	168 hrs	3	77	231 / 0
PreCon Temp Cycle	JESD22-A104	-65°C to +150°C 500 Cycles	100 cycles	3	77	231 / 0
		-65°C to +150°C 500 Cycles	500 cycles	3	77	231 / 0
HTSL (no PreCon)	JESD22-A103	1000hrs, 0V, 150°C	500 hrs	3	77	231 / 0
		1000hrs, 0V, 150°C	1000 hrs	3	77	231 / 0
Physical Dimension	JESD22-B100	Per Datasheet	NA	3	5	15 / 0
External Visual Insp	JESD22-B101	NA	NA	3	5	15 / 0
Solderability	J-STD-020	Pb-Free Solder Dip 245°C	NA	1	5	15 / 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: Aug-2014, updated Jul 2015
 Subject: Pericom Package Qualification Report
 Qual Device: PI3CH480LE - NFME

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

PT7C43190LE				
PT7C4337LE				
PT7C43390LE				
PT7C4372ALE				
PT7C4563LE				
PT7C4563LE				
PT7C4372ALE				
PI3C3306LE				
PI3C3305LE				
PI5C3305LE				
PI5C3306LE				
PI3VT3306LE				
PI3C3125LE				
PI3C3125LE				
PI3B3125LE				
PI3C3126LE				
PI3CH401LE				
PI3CH400LE				
PI3B3251LE				
PI3B3253LE				
PI3B3257LE				
PI3CH360LE				
PI3CH480LE				
PI3CH200LE				
PI4IOE5V9554LE				
PI4MSD5V9543ALE				
PI4MSD5V9545ALE				
PI4MSD5V9548ALE				
PI4IOE5V9539LEX				

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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:	PS8A0040AWE
Supplier (Code):	NFME (K)
Pkg Type - Code:	SOIC16 (W16)
Outline Drawing:	PD-1004
By Extension Pkg:	W08

Qual Test Date:	Jul-2015
Die Attach Material:	EN4620K
Wire Size & Material:	0.8 mil PdCu
Mold Compound:	CEL8240HF10
Leadframe Material:	Copper (A194)
Lead Finish:	100% matte tin (Sn)
Date Codes:	YxxKG

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	253	759 / 0
CSAM	J-STD-020	No delamination of Die Top, Wire bond, Down bond areas	NA	3	22	66 / 0
PreCon PUHAST	JESD22-A118	130C, 85% RH, 96Hrs, 33.3 psia (230kPa)	96 hrs	3	77	231 / 0
PreCon BHAST	JESD22-A110	130C, 85% RH, 33.3 psia (230kPa), Vmax	96 hrs	3	77	231 / 0
		130C, 85% RH, 33.3 psia (230kPa), Vmax	192 hrs	3	77	231 / 0
PreCon Temp Cycle	JESD22-A104	-65°C to +150°C	100 cycles	3	77	231 / 0
		-65°C to +150°C	500 cycles	3	77	231 / 0
HTSL (no PreCon)	JESD22-A103	1000hrs, 0V, 150°C	500 hrs	3	77	231 / 0
		1000hrs, 0V, 150°C	1000 hrs	3	77	231 / 0
Physical Dimension	JESD22-B100	Per Datasheet	NA	3	5	15 / 0
External Visual Insp	JESD22-B101	NA	NA	3	5	15 / 0
Solderability	J-STD-020	Pb-Free Solder Dip 245°C	NA	3	5	15 / 0
	JESD22-B102					

Qualificaton 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: **Jul-2015**
 Subject: **Pericom Package Qualification Report**
 Qual Device: **PS8A0040AWE - NFME**

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

PS8A0031WE	PT8A9010WE	PS8A0080WE	PT7C4307WE	PT8A3222WE	PT8A3300NWE
PI3B3253WE	PT8A9781WE	PS8A0081WE	PT7C4311WE	PT8A3227AWE	PT8A3301AWE
PI3B3257WE	PT8A978BLWE	PS8A0082WE	PT7C43190WE	PT8A3227WE	PT8A3301BWE
PS8A0032WE	PT8T1301WE	PS8A0083WE	PT7C4337AWE	PT8A3230WE	PT8A3301CWE
PS8A0033WE	PT8A3518BWE	PS8A0084WE	PT7C4337WE	PT8A3231WE	PT8A3301EWE
PS8A0034WE	PT8A3519AWE	PS8A0085WE	PT7C433833WE	PT8A3232WE	PT8A3302AWE
PS8A0039WE	PT8A3519BWE	PS8A0086WE	PT7C43390WE	PT8A3233WE	PT8A3302BWE
PS8A0040AWE	PT8A9011WE	PS8A0087WE	PT7C4363WE	PT8A3234WE	PT8A3302RWE
PS8A0040CWE	PT8A94B02WE	PS8A0089QWE	PT7C4372AWE	PT8A3235WE	PT8A3302SWE
PS8A0143AWE	PI5PD1922BWE	PS8A0089SWE	PT7C4501WE	PT8A3236WE	PT8A3303AWE
PS8A0143BWE	PI5PD2065WE	PS8A0089TWE	PT7C4502WE	PT8A3237WE	PT8A3304LWE
PS8A0143HWE	PI5PD2069WE	PS8A0090WE	PT7C4511WE	PT8A3240AWE	PT8A3305HWE
PS8A0143IWE	PI6C4511WE	PS8A0094WE	PT7C4512WE	PT8A3240WE	PT8A3305LWE
PS8AES01WE	PI6C4512WE	PS8A0095WE	PT7C4563WE	PT8A3241WE	PT8A3307HWE
PS8AES02WE	PI6ULS5V9306WE	PS8A0099MWE	PT7C5002LBWE	PT8A3242WE	PT8A3307LWE
PS8AES05WE	PI6ULS5V9509WE	PS8A0099QWE	PT7C5002LCWE	PT8A3243WE	PT8A3307NWE
PS8AES06WE	PI6ULS5V9515AWE	PS8A0099UWE	PT7C5002LDWE	PT8A3244WE	PT8A3511WE
PS8AES07WE	PI6ULS5V9517AWE	PS8A0101AWE	PT7C5002LEWE	PT8A3245WE	PT8A3512WE
PS8AES08WE	PS7C8563WE	PS8A0101BWE	PT7C5006ANBWE	PT8A3246WE	PT8A3514AWE
PT74HC595WE	PS8A0004WE	PS8A0102AWE	PT7C5006ANCWE	PT8A3247WE	PT8A3514BWE
PT8A2611WE	PS8A0011WE	PS8A0102BWE	PT7C5006ANDWE	PT8A3270WE	PT8A3514CWE
PT8A261WE	PS8A0012WE	PS8A0103WE	PT7C5006ANEWE	PT8A3274WE	PT8A3515AWE
PT8A2620WE	PS8A0013WE	PS8A0107WE	PT7C5009AL1WE	PT8A3275WE	PT8A3515BWE
PT8A2621WE	PS8A0014WE	PS8A0130BWE	PT7C5009AL2WE	PT8A3280CWE	PT8A3516AWE
PT8A262WE	PS8A0015WE	PS8A0132AWE	PT7C5009AL3WE	PT8A3280WE	PT8A3516BWE
PT8A263WE	PS8A0016WE	PS8A0132BWE	PT7C5009AL4WE	PT8A3281WE	PT8A3516FWE
PT8A2641WE	PS8A0017WE	PS8A0132RWE	PT7C5009AL5WE	PT8A3282WE	PT8A3517AWE
PT8A2642WE	PS8A0020WE	PS8A0132SWE	PT7C5009AL6WE	PT8A3283WE	PT8A3517BWE
PT8A2645WE	PS8A0021WE	PS8A0389MWE	PT7M7533WE	PT8A3284WE	PT8A3518AWE
PT8A2646WE	PS8A0022WE	PS8A0389QWE	PT7V2727WE	PT8A3285BWE	
PT8A2647WE	PS8A0023WE	PS8A0389UWE	PT7V3727WE	PT8A3285WE	
PT8A2648WE	PS8A0024WE	PS8A0399MWE	PT7V4027WE	PT8A3286WE	
PT8A2651WE	PS8A0025WE	PS8A0399QWE	PT7V4035WE	PT8A3287BWE	
PT8A2703WE	PS8A0026WE	PS8A0399UWE	PT8A2511WE	PT8A3287WE	
PT8A3251WE	PS8A0027WE	PS8A1020WE	PT8A2541WE	PT8A3289QWE	
PT8A3252WE	PS8A0050NWE	PT7A7511WE	PT8A2544PE	PT8A3289SWE	
PT8A3253WE	PS8A0050WE	PT7A7512WE	PT8A2544WE	PT8A3289TWE	
PT8A3254WE	PS8A0054WE	PT7A7513WE	PT8A2562WE	PT8A3290WE	
PT8A3263AWE	PS8A0055WE	PT7A7514WE	PT8A2704AWE	PT8A3294BWE	
PT8A3263BWE	PS8A0057NWE	PT7A7515WE	PT8A2704WE	PT8A3294WE	
PT8A3263HWE	PS8A0057WE	PT7A7521WE	PT8A2766AWE	PT8A3295WE	
PT8A3263IWE	PS8A0060WE	PT7A7522WE	PT8A2766DWE	PT8A3298AWE	
PT8A3410WE	PS8A0065WE	PT7A7523WE	PT8A2766EWE	PT8A3298WE	
PT8A3411WE	PS8A0067WE	PT7A7533WE	PT8A2767FWE	PT8A3299MWE	
PT8A3412WE	PS8A0070WE	PT7A7534WE	PT8A3201WE	PT8A3299QWE	
PT8A3413WE	PS8A0074WE	PT7A7535WE	PT8A320WE	PT8A3299UWE	
PT8A6301WE	PS8A0075WE	PT7C4302WE	PT8A3216WE	PT8A3300BWE	

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:	PI3B3253LE
Supplier (Code):	SAT (S)
Pkg Type - Code:	TSSOP-16 (L16)
Outline Drawing:	PD-1310
By Extension Pkg:	L14

Qual Test Date:	Apr-2016
Die Attach Material:	84-1LMISR4
Wire Size & Material:	0.8 mil PdCu
Mold Compound:	EME-G700LY
Leadframe Material:	Copper
Lead Finish:	100% Matte Sn
Date Codes:	1603SG, 1603SG, 1603SG

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	253	759 / 0
CSAM	J-STD-020	No delamination of Die Top, Wire bond, Down bond areas	NA	3	22	66 / 0
PreCon UHAST	JESD22-A118	130C, 85% RH, 96Hrs, 33.3 psia (230kPa)	96 hrs	3	77	231 / 0
PreCon BHAST	JESD22-A110	130C, 85% RH, 33.3 psia (230kPa), Vmax	96 hrs	3	77	231 / 0
		130C, 85% RH, 33.3 psia (230kPa), Vmax	192 hrs	3	77	231 / 0
PreCon Temp Cycle	JESD22-A104	-65°C to +150°C	100 cycles	3	77	231 / 0
		-65°C to +150°C	500 cycles	3	77	231 / 0
HTSL (no PreCon)	JESD22-A103	1000hrs, 0V, 150°C	500 hrs	3	77	231 / 0
		1000hrs, 0V, 150°C	1000 hrs	3	77	231 / 0
Physical Dimension	JESD22-B100	Per Datasheet	NA	3	5	15 / 0
External Visual Insp	JESD22-B101	Workmanship, Marking, etc.	NA	3	5	15 / 0
Solderability	J-STD-020 JESD22-B102	Pb-Free Solder Dip 245°C	NA	3	5	15 / 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@diodes.com

Date: Apr-2016
 Subject: Pericom Package Qualification Report
 Qual Device: PI3B3253LE

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

PI6C557-03ALEX	PI6C2409-1HLEX			
PI6C557-03LEX	PI6CFGL202BLIEX			
PI5C3253LEX	PI6C490094LEX			
PI3CH480LEX	PI6C490094LIEX			
PI6C10806BLEX	PI6LC5011-01LEX			
PI6C490086LEX	PI6LC5011-01LIEX			
PI6C557-10LEX	PI6LC5011-02LEX			
PI49FCT32802LEX	PI6LC5011-02LIEX			
PI3USB20LEX	PI7C9X1170BBLEX			
PI3L110LEX	PI3C3125LEX			
PI49FCT3803LEX	PI3C3126LEX			
PI90LV047ALEX	PI3B3125LEX			
PI6C2409-1HLEX	PI3B3126LEX			
PI3B3257LEX	PI4ULS3V204LEX			
PI5C3257LEX	PI3CH401LEX			
PI3B3253LEX	PI4GTL2014LEX			
PI5L200LEX	PI4GTL2034LEX			
PI90LV031ALEX	PI4MSD5V9542ALEX			
PI90LV032ALEX	PI4MSD5V9543ALEX			
PI90LVT048ALEX	PI4MSD5V9543BLEX			
PI90LV048ALEX	PI6C49X0206TLIEX			
PI6C490097LEX				
PI3V312LEX				
PI6LC48H02LIEX				
PI6C490098LEX				
PI6C557-03BLEX				
PI3B3251LEX				
PI49FCT32803LEX				
PI49FCT20802LEX				
PI6LC48H02ALIEX				
PI6C4931502-04LIEX				
PI6C557-03AQLEX				
PI6C22409P-1HLEX				
PI49FCT20803LEX				
PI49FCT3802LEX				
PI7C9X760BBLEX				
PI6LC48H02-01LIEX				
PI3CH360LEX				
PI3CH400LEX				
PI4IOE5V9554LEX				
PI4IOE5V9557LEX				
PI4MSD5V9546ALEX				
PI4MSD5V9646LEX				