



Cypress Semiconductor Corporation, 198 Champion Court, San Jose, CA 95134. Tel: (408) 943-2600

PCN: PCN191204

Date: March 18, 2019

Subject: Qualification of Greatek Electronics Inc. as an Additional Assembly Site for Select 28-Lead QFN and 48-Lead LQFP HX2VL Products

To: PCN Coordinator PCN Coordinator
FUTURE
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Change Type: Major

Description of Change:

Cypress announces the qualification of Greatek Electronics Inc., (No.136, Gon-Yi Rd. Zhunan Township, Miaoli County 350 Taiwan, R.O.C.) as an additional assembly site for select 28-Lead QFN (5x5x0.8mm) and 48-Lead LQFP (7x7x1.4mm) HX2VL products.

The 28-Lead QFN (5x5x0.8mm) and 48-Lead LQFP (7x7x1.4mm) packages are assembled at Greatek Electronics Inc. using the following Bill of Materials:

Material	Greatek Electronics Inc. Bill of Materials		TICP Bill of Materials	
	28-Lead QFN	48-Lead LQFP	28-Lead QFN	48-Lead LQFP
Mold Compound	Sumitomo EME-G700H	Sumitomo EME-G700H	Hitachi CEL-9220HF	Sumitomo EME-G700L
Leadframe	Shinko CDA194PPF+ NiPdAu plating	Mitsui C7025+Ag plating	DCI C194+ CDA194+ NiPdAu plating	Fusheng C7025 with Ag plating
Die Attach Material	Sumitomo CRM-1076DJ-G	Henkel 8352L	Hitachi EN4900GC	Sumitomo CRM-1710A
Bond Wire	0.8 mil Au	0.8 mil Au	0.8 mil Au	0.8 mil Au

Benefit of Change:

Qualification of alternate manufacturing sites is part of the ongoing flexible manufacturing initiative announced by Cypress. The goal of the flexible manufacturing initiative is to provide the means for Cypress to continue to meet delivery commitments through dynamic, changing market conditions.

Part Numbers Affected: 12

See the attached 'Affected Parts List' file for a list of all part numbers affected by this change. Note that any new parts that are introduced after the publication of this PCN will include all changes outlined in this PCN.

Qualification Status:

This assembly site has been qualified through a series of tests documented in the Qualification Test Plan QTP#184508. This qualification report can be found as an attachment to this PCN or by visiting www.cypress.com and typing the QTP number in the keyword search window.

Sample Status:

Qualification samples may not be built ahead of time for all part numbers affected by this change. Please review the attached 'Affected Parts List' file for a list of affected part numbers with their associated Greatek Electronics Inc. sample ordering part numbers. Samples are available now unless there is an indication that the sample ordering part numbers are subject to lead times. If you require qualification samples, please contact your local Cypress sales representative as soon as possible, preferably within 30 days of the date of this PCN, to place any sample orders.

Approximate Implementation Date:

Effective 90 days from the date of this notification or upon customer approval, whichever comes first, all shipments of Commercial, Industrial and Automotive non-PPAP part numbers in the attached file will be assembled at Greatek Electronics Inc. or other approved assembly sites.

Anticipated Impact:

Products assembled at the new site are completely compatible with existing products from form, fit, functional, parametric and quality performance perspectives.

Cypress also recommends that customers take this opportunity to review these changes against current application notes, system design considerations and customer environment conditions to assess impact (if any) to their application.

Method of Identification:

Cypress maintains traceability of product to wafer level, including wafer fabrication location, through the lot number marked on the package.

Response Required:

No response is required.

For additional information regarding this change, contact your local sales representative or contact the PCN Administrator at pcn_adm@cypress.com.

Sincerely,

Cypress PCN Administration



Cypress Semiconductor Package Qualification Report

QTP# 184508 VERSION
December 2018**

**28-Pin QFN/48L LQFP
NiPdAu/Pure Sn Leadfinish, Au Wire
MSL3, 260°C Reflow
Greatek-Taiwan**

FOR ANY QUESTIONS ON THIS REPORT, PLEASE CONTACT
reliability@cypress.com or via a CYLINK CRM CASE

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PACKAGE QUALIFICATION HISTORY

QTP Number	Description of Qualification Purpose	Date
184508	Qualification of GREATEK ELECTRONICS INC. as an additional Assembly Site for QFN-28 5x5x0.8 mm and LQFP-48 7x7x1.4 mm HX2VL Products	December 2018

MAJOR PACKAGE INFORMATION USED IN THIS QUALIFICATION

Package Designation:	LT28A
Package Outline, Type, or Name:	28-Pin QFN (5x5x0.75mm)
Mold Compound Name/Manufacturer:	EME-G700H/Sumitomo
Mold Compound Flammability Rating:	V-0 UL94
Oxygen Rating Index: >28%	54%
Lead Frame Designation:	Full Metal Paddle
Lead Frame Material:	Copper
Lead Finish, Composition / Thickness:	NiPdAu
Die Backside Preparation Method/Metallization:	Backgrind
Die Separation Method:	Saw Process
Die Attach Supplier:	Sumitomo
Die Attach Material:	CRM-1076DJ-G
Wire Bond Method:	Thermosonic
Wire Material/Size:	Au/0.8 mil (20um)
Package Cross Section Yes/No:	Yes
Name/Location of Assembly (prime) facility:	Greatek-Taiwan
MSL Level	3
Reflow Profile	260C

ELECTRICAL TEST / FINISH DESCRIPTION

Test Location:	Panther Technology Co., Ltd., Taiwan
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MAJOR PACKAGE INFORMATION USED IN THIS QUALIFICATION

Package Designation:	AZ48
Package Outline, Type, or Name:	48L LQFP (7x7x1.4mm)
Mold Compound Name/Manufacturer:	EME-G700H/Sumitomo
Mold Compound Flammability Rating:	V-0 UL94
Oxygen Rating Index: >28%	54%
Lead Frame Designation:	Full Metal Paddle
Lead Frame Material:	Copper
Lead Finish, Composition / Thickness:	Pure Sn
Die Backside Preparation Method/Metallization:	Backgrind
Die Separation Method:	Saw Process
Die Attach Supplier:	Henkel
Die Attach Material:	8352L
Wire Bond Method:	Thermosonic
Wire Material/Size:	Au/0.8 mil (20um)
Package Cross Section Yes/No:	Yes
Name/Location of Assembly (prime) facility:	Greatek-Taiwan
MSL Level	3
Reflow Profile	260C

ELECTRICAL TEST / FINISH DESCRIPTION

Test Location:	Panther Technology Co., Ltd., Taiwan
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RELIABILITY TESTS PERFORMED PER SPECIFICATION REQUIREMENTS

Stress/Test	Test Condition (Temp/Bias)	Result P/F
Acoustic Microscopy	J-STD-020 Precondition: JESD22 Moisture Sensitivity Level (192 Hrs., 30°C, 60% RH, 260°C Reflow)	P
Ball Shear	JESD22-B116	P
Bond Pull	MIL-STD-883 – Method 2011	P
Constructional Analysis	Criteria: Meet external and internal characteristics of Cypress package	P
Die Shear	MIL-STD-883, Method 2019 Per die size: <ul style="list-style-type: none"> • <3000 sq. mils = 1.2 kgf • 30001-5000 sq. mils = 1.2 kgf • >5001 sq. mils = 1.2 kgf 	P
Dye Penetrant Test	Test to determine the existence and extent of cracks, Criteria: No Package Crack	P
Final Visual Inspection	JESD22-B101	P
High Accelerated Saturation Test (HAST)	JEDEC STD 22-A110: 130°C, 85%RH, 3.3V Precondition: JESD22 Moisture Sensitivity Level (192 Hrs., 30°C, 60% RH, 260°C Reflow)	P
High Accelerated Saturation Test (HAST) - Unbiased	JEDEC STD 22-A110: 130°C, 85%RH Precondition: JESD22 Moisture Sensitivity Level (192 Hrs., 30°C, 60% RH, 260°C Reflow)	P
High Temperature Operating Life Latent Failure Rate	JESD22-A108, 125°C Dynamic Operating Condition, Vcc = 3.3V	P
High Temp Storage	JESD22-A103: 150°C, no bias	P
Internal Visual Inspection	MIL-STD-883-2014	P
Lead Integrity	JESD22-B105, MIL STD 883	P
Physical Dimension	MIL-STD-1835, JESD22-B100	P
Pressure Cooker Test	JESD22-A102, 121°C, 100%RH, 15 PSIG Precondition: JESD22 Moisture Sensitivity Level (192 Hrs., 30°C, 60% RH, 260°C Reflow)	P
Solderability, Steam Aged	J-STD-002, JESD22-B102 95% solder coverage minimum	P
Temperature Cycle	MIL-STD-883, Method 1010, Condition C, -65°C to 150°C Precondition: JESD22 Moisture Sensitivity Level (192 Hrs., 30°C, 60% RH, 260°C Reflow)	P
Temperature Humidity	JESD22-A101: Unbiased 85C/85%RH Precondition: JESD22 Moisture Sensitivity Level (192 Hrs., 30°C, 60% RH, 260°C Reflow)	P
X-Ray	MIL-STD-883 - 2012	P

Reliability Test Data

QTP #: 184508

<i>Device</i>	<i>Fab Lot #</i>	<i>Assy Lot #</i>	<i>Assy Loc</i>	<i>Duration</i>	<i>Samp</i>	<i>Rej</i>	<i>Failure Mechanism</i>
STRESS: ACOUSTIC, MSL3							
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	COMP	22	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	COMP	22	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	COMP	22	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	COMP	22	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	COMP	45	0	
CY7C65642 (7G65642A)	SBA157.1	SBA157.1	Greatek-Taiwan	COMP	45	0	
STRESS: BALL SHEAR							
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	COMP	10	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	COMP	10	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	COMP	10	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	COMP	10	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	COMP	10	0	
CY7C65642 (7G65642A)	SBA157.1	SBA157.1	Greatek-Taiwan	COMP	10	0	
STRESS: BOND PULL							
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	COMP	10	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	COMP	10	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	COMP	10	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	COMP	10	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	COMP	10	0	
CY7C65642 (7G65642A)	SBA157.1	SBA157.1	Greatek-Taiwan	COMP	10	0	
STRESS: CONSTRUCTIONAL ANALYSIS							
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	COMP	5	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	COMP	5	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	COMP	5	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	COMP	5	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	COMP	5	0	



Reliability Test Data

QTP #: 184508

<i>Device</i>	<i>Fab Lot #</i>	<i>Assy Lot #</i>	<i>Assy Loc</i>	<i>Duration</i>	<i>Samp</i>	<i>Rej</i>	<i>Failure Mechanism</i>
STRESS: DIE SHEAR							
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	COMP	5	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	COMP	5	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	COMP	5	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	COMP	5	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	COMP	5	0	
CY7C65642 (7G65642A)	SBA157.1	SBA157.1	Greatek-Taiwan	COMP	5	0	
STRESS: DYE PENETRANT							
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	COMP	15	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	COMP	15	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	COMP	15	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	COMP	15	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	COMP	15	0	
STRESS: FINAL VISUAL							
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	COMP	9533	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	COMP	981	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	COMP	19009	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	COMP	981	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	COMP	66903	0	
CY7C65642 (7G65642A)	SBA157.1	SBA157.1	Greatek-Taiwan	COMP	491	0	
STRESS: GLUE ADHESION							
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	COMP	15	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	COMP	15	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	COMP	15	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	COMP	15	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	COMP	15	0	



Reliability Test Data

QTP #: 184508

<i>Device</i>	<i>Fab Lot #</i>	<i>Assy Lot #</i>	<i>Assy Loc</i>	<i>Duration</i>	<i>Samp</i>	<i>Rej</i>	<i>Failure Mechanism</i>
STRESS: INTERNAL VISUAL							
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	COMP	5	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	COMP	5	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	COMP	5	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	COMP	5	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	COMP	5	0	
STRESS: LEAD INTEGRITY							
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	COMP	5	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	COMP	5	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	COMP	5	0	
STRESS: HIGH ACCELERATED SATURATION TEST 130C, 85%RH, 3.3V, PRE COND 192 HRS 30C/60%RH, MSL3							
CY7C65642 (7G65642A)	SGU872.1	SGU872.1	Greatek-Taiwan	96	77	0	
STRESS: HI-ACCEL SATURATION TEST- UNBIASED (130C, 85%RH), PRE COND 192 HR 30C/60%RH (MSL3)							
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	96	77	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	96	77	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	96	77	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	96	77	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	96	77	0	
CY7C65642 (7G65642A)	SBA157.1	SBA157.1	Greatek-Taiwan	96	77	0	
STRESS: HIGH TEMP DYNAMIC OPERATING LIFE-LATENT FAILURE RATE (125C, 3.3V, Vcc Max)							
CY7C65642 (7G65642A)	SN68644	SN68644	Greatek-Taiwan	1000	77	0	
CY7C65634 (7G65632A)	0	0	Greatek-Taiwan	1000	77	0	



Reliability Test Data

QTP #: 184508

<i>Device</i>	<i>Fab Lot #</i>	<i>Assy Lot #</i>	<i>Assy Loc</i>	<i>Duration</i>	<i>Samp</i>	<i>Rej</i>	<i>Failure Mechanism</i>
STRESS: HIGH TEMP STORAGE, 150C							
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	168	77	0	
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	1000	77	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	168	77	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	1000	77	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	168	77	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	1000	77	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	168	77	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	1000	77	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	168	77	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	1000	77	0	
CY7C65642 (7G65642A)	SBA157.1	SBA157.1	Greatek-Taiwan	168	77	0	
CY7C65642 (7G65642A)	SBA157.1	SBA157.1	Greatek-Taiwan	1000	77	0	
STRESS: PHYSICAL DIMENSION							
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	COMP	30	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	COMP	30	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	COMP	30	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	COMP	30	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	COMP	30	0	
CY7C65642 (7G65642A)	SBA157.1	SBA157.1	Greatek-Taiwan	COMP	30	0	
STRESS: PRESSURE COOKER TEST (121C, 100%RH), 15 Psig, PRE COND 192 HR 30C/60%RH (MSL3)							
CY7C65642(7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	168	77	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	168	77	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	168	77	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	168	77	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	168	77	0	
CY7C65642 (7G65642A)	SBA157.1	SBA157.1	Greatek-Taiwan	168	77	0	



Reliability Test Data

QTP #: 184508

Device	Fab Lot #	Assy Lot #	Assy Loc	Duration	Samp	Rej	Failure Mechanism
STRESS: SOLDERABILITY TEST							
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	COMP	4	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	COMP	3	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	COMP	4	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	COMP	3	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	COMP	4	0	
CY7C65642 (7G65642A)	SBA157.1	SBA157.1	Greatek-Taiwan	COMP	3	0	
STRESS: TEMPERATURE CYCLE COND. C -65C TO 150C, PRE COND 192 HRS 30C/60%RH, MSL3							
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	100	77	0	
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	500	77	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	100	77	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	500	77	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	100	77	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	500	77	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	100	77	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	500	77	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	100	77	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	500	77	0	
CY7C65642 (7G65642A)	SBA157.1	SBA157.1	Greatek-Taiwan	100	77	0	
CY7C65642 (7G65642A)	SBA157.1	SBA157.1	Greatek-Taiwan	500	77	0	
STRESS: TEMPERATURE HUMIDITY 85C/85%RH, PRE COND 192 HRS 30C/60%RH, MSL3							
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	168	77	0	
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	1000	77	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	168	77	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	1000	77	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	168	77	0	
CY7C65642 (7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	1000	77	0	



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<i>Device</i>	<i>Fab Lot #</i>	<i>Assy Lot #</i>	<i>Assy Loc</i>	<i>Duration</i>	<i>Samp</i>	<i>Rej</i>	<i>Failure Mechanism</i>
STRESS: TEMPERATURE HUMIDITY 85C/85%RH, PRE COND 192 HRS 30C/60%RH, MSL3							
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	168	77	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	1000	77	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	168	77	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	1000	77	0	
CY7C65642 (7G65642A)	SBA157.1	SBA157.1	Greatek-Taiwan	168	77	0	
CY7C65642 (7G65642A)	SBA157.1	SBA157.1	Greatek-Taiwan	1000	77	0	
STRESS: X-RAY							
CY7C65642 (7G65642A)	SGA385.1	SGA385.1	Greatek-Taiwan	COMP	16	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473121	Greatek-Taiwan	COMP	16	0	
CY7C65642(7G65642A)	SGU368.1	SGU368.1	Greatek-Taiwan	COMP	16	0	
CY7C65634 (7G65632A)	SGV564.1	XNA528473123	Greatek-Taiwan	COMP	16	0	
CY7C65642 (7G65642A)	SFX108.1	SFX108.1	Greatek-Taiwan	COMP	16	0	



Document History Page

Document Title: QTP# 184508: QUALIFICATION OF GREATEK ELECTRONICS INC. AS AN ADDITIONAL ASSEMBLY SITE FOR QFN-28 5X5X0.8MM AND LQFP-48 7X7X1.4MM HX2VL PRODUCTS
Document Number: 002-25902

Rev.	ECN No.	Orig. of Change	Description of Change
**	6405874	JYF	Initial release.

Item	Marketing Part Number	Sample Order Part Number	Sample Availability
1	CY7C65632-28LTXC	CY7C65632-28LTXCKL	Available
2	CY7C65632-28LTXCT	CY7C65632-28LTXCKL	Available
3	CY7C65632-48AXC	CY7C65632-48AXCKL	Available
4	CY7C65632-48AXCT	CY7C65632-48AXCKL	Available
5	CY7C65634-28LTXC	CY7C65634-28LTXCKL	Available
6	CY7C65634-28LTXCT	CY7C65634-28LTXCKL	Available
7	CY7C65634-48AXC	CY7C65634-48AXCKL	Available
8	CY7C65634-48AXCT	CY7C65634-48AXCKL	Available
9	CY7C65642-28LTXC	CY7C65642-28LTXCKL	Available
10	CY7C65642-28LTXCT	CY7C65642-28LTXCKL	Available
11	CY7C65642-48AXC	CY7C65642-48AXCKL	Available
12	CY7C65642-48AXCT	CY7C65642-48AXCKL	Available