

# Cypress Semiconductor Finish Qualification Report

**QTP# 160802 VERSION \*\*  
March 2016**

**32L SOIC Package (300 mils)  
FINISH SITE  
UTAC, Thailand Limited (UTL)**

**FOR ANY QUESTIONS ON THIS REPORT, PLEASE CONTACT  
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**FINISH QUALIFICATION HISTORY**

<b>QTP Number</b>	<b>Description of Qualification Purpose</b>	<b>Date</b>
142301	16L/24L QFN Package Qualification at UTAC-Thailand Limited (UTL) Finish Site	August 2014
142302	16L SOIC (150 mils) Package Qualification at UTAC-Thailand Limited (UTL) Finish Site	December 2014
160804	14L DFN (2.5X3.5X0.6mm) Package Qualification at UTAC-Thailand Limited (UTL) Finish Site	March 2016
160802	32L SOIC (300 mils) Package Qualification at UTAC-Thailand Limited (UTL) Finish Site	March 2016

## PROCESS ENGINEERING QUALIFICATION PERFORMED PER SPECIFICATION REQUIREMENTS

Test	Test Condition (Reference Specifications)	Result P/F
CADFIT Analysis	Pass POD & End flash Criteria	P
Dimensional Measurement	POD Drawing-JESD22-B100	P
Surface Resistivity Measurement	Conductive Packing/shipping material: $10^5\Omega/\text{sq}$ Static dissipative Packing/shipping material: $10^5\text{-}10^{12}\Omega/\text{sq}$	P
Functionality Test	Pass Manufacturability	P
Drop Test	Non-Dry Packed Material: No tears & punctures Boxes: No Complete structural damage, No progressive crumpling/deformed, no tears & punctures.	P
PBFT	Min $\geq$ 30gr Average= $50\pm$ gr Max $\leq$ 70gr	P
Bend Test	No separation along pocket and ridge area	P
Substance Check	European Union RoHS 2002/95/E REACH XVII	P
Split PBFT Test	Delta of Sprocket side and its opposite side: 5 gr Range: 20 gr	P
Detaping	No cover tape tearing	P
Quick Hand Pull Test	No cover tape tearing	P
External Visual	MIL-PRF-38535, MIL-STD-883, METHOD 2009	P



## Reliability Test Data QTP #:142301

<i>Device</i>	<i>Assy Lot #</i>	<i>Package</i>	<i>Finish Site</i>	<i>Duration</i>	<i>Samp</i>	<i>Rej</i>	<i>Failure Mechanism</i>
<b>STRESS: BEND TEST</b>							
CY8C20236A (8C202662AC)	611417549	LG16A QFN	UTAC, THAILAND	COMP	1 STRIP	0	
CY8CMBR31 (8CP44303AC)	611418221	LQ16A QFN	UTAC, THAILAND	COMP	1 STRIP	0	
CY8CMBR31 (8CP44304AC)	611418218	LG24A QFN	UTAC, THAILAND	COMP	1 STRIP	0	
<b>STRESS: CADFIT ANALYSIS</b>							
CY8C20236A (8C202662AC)	611417549	LG16A QFN	UTAC, THAILAND	COMP	1	0	
CY8CMBR31 (8CP44303AC)	611418221	LQ16A QFN	UTAC, THAILAND	COMP	1	0	
CY8CMBR31 (8CP44304AC)	611418218	LG24A QFN	UTAC, THAILAND	COMP	1	0	
<b>STRESS: DETAPING</b>							
CY8C20236A (8C202662AC)	611417549	LG16A QFN	UTAC, THAILAND	COMP	10	0	
CY8CMBR31 (8CP44303AC)	611418221	LQ16A QFN	UTAC, THAILAND	COMP	10	0	
CY8CMBR31 (8CP44304AC)	611418218	LG24A QFN	UTAC, THAILAND	COMP	10	0	
<b>STRESS: DIMENSIONAL MESAUREMENT</b>							
CY8C20236A (8C202662AC)	611417549	LG16A QFN	UTAC, THAILAND	COMP	10	0	
CY8CMBR31 (8CP44303AC)	611418221	LQ16A QFN	UTAC, THAILAND	COMP	10	0	
CY8CMBR31 (8CP44304AC)	611418218	LG24A QFN	UTAC, THAILAND	COMP	10	0	
<b>STRESS: DROP TEST</b>							
CY8C20236A (8C202662AC)	611417549	LG16A QFN	UTAC, THAILAND	COMP	30	0	
CY8CMBR31 (8CP44303AC)	611418221	LQ16A QFN	UTAC, THAILAND	COMP	30	0	
CY8CMBR31 (8CP44304AC)	611418218	LG24A QFN	UTAC, THAILAND	COMP	30	0	
<b>STRESS: EXTERNAL VISUAL</b>							
CY8C20236A (8C202662AC)	611417549	LG16A QFN	UTAC, THAILAND	COMP	461	0	
CY8CMBR31 (8CP44303AC)	611418221	LQ16A QFN	UTAC, THAILAND	COMP	461	0	
CY8CMBR31 (8CP44304AC)	611418218	LG24A QFN	UTAC, THAILAND	COMP	461	0	
<b>STRESS: FUNCTIONALITY TEST</b>							
CY8C20236A (8C202662AC)	611417549	LG16A QFN	UTAC, THAILAND	COMP	10	0	
CY8CMBR31 (8CP44303AC)	611418221	LQ16A QFN	UTAC, THAILAND	COMP	10	0	
CY8CMBR31 (8CP44304AC)	611418218	LG24A QFN	UTAC, THAILAND	COMP	10	0	



## Reliability Test Data QTP #:142301

<i>Device</i>	<i>Assy Lot #</i>	<i>Package</i>	<i>Finish Site</i>	<i>Duration</i>	<i>Samp</i>	<i>Rej</i>	<i>Failure Mechanism</i>
<b>STRESS: PEEL BACK FORCE TEST</b>							
CY8C20236A (8C202662AC)	611417549	LG16A QFN	UTAC, THAILAND	COMP	30	0	
CY8CMBR31 (8CP44303AC)	611418221	LQ16A QFN	UTAC, THAILAND	COMP	30	0	
CY8CMBR31 (8CP44304AC)	611418218	LG24A QFN	UTAC, THAILAND	COMP	30	0	
<b>STRESS: QUICK HAND PULL TEST</b>							
CY8C20236A (8C202662AC)	611417549	LG16A QFN	UTAC, THAILAND	COMP	30	0	
CY8CMBR31 (8CP44303AC)	611418221	LQ16A QFN	UTAC, THAILAND	COMP	30	0	
CY8CMBR31 (8CP44304AC)	611418218	LG24A QFN	UTAC, THAILAND	COMP	30	0	
<b>STRESS: SOLDERABILITY</b>							
CY8C20236A (8C202662AC)	611417549	LG16A QFN	UTAC, THAILAND	COMP	3	0	
CY8CMBR31 (8CP44303AC)	611418221	LQ16A QFN	UTAC, THAILAND	COMP	3	0	
CY8CMBR31 (8CP44304AC)	611418218	LG24A QFN	UTAC, THAILAND	COMP	3	0	
<b>STRESS: SPLIT PEEL BACK FORCE TEST</b>							
CY8C20236A (8C202662AC)	611417549	LG16A QFN	UTAC, THAILAND	COMP	10	0	
CY8CMBR31 (8CP44303AC)	611418221	LQ16A QFN	UTAC, THAILAND	COMP	10	0	
CY8CMBR31 (8CP44304AC)	611418218	LG24A QFN	UTAC, THAILAND	COMP	10	0	
<b>STRESS: SUBSTANCE CHECK (CARRIER TAPE)</b>							
CY8C20236A (8C202662AC)	611417549	LG16A QFN	UTAC, THAILAND	COMP	1	0	
CY8CMBR31 (8CP44303AC)	611418221	LQ16A QFN	UTAC, THAILAND	COMP	1	0	
CY8CMBR31 (8CP44304AC)	611418218	LG24A QFN	UTAC, THAILAND	COMP	1	0	
<b>STRESS: SURFACE RESISTIVITY MEASUREMENT</b>							
CY8C20236A (8C202662AC)	611417549	LG16A QFN	UTAC, THAILAND	COMP	10	0	
CY8CMBR31 (8CP44303AC)	611418221	LQ16A QFN	UTAC, THAILAND	COMP	10	0	
CY8CMBR31 (8CP44304AC)	611418218	LG24A QFN	UTAC, THAILAND	COMP	10	0	



## Reliability Test Data QTP #:142302

<i>Device</i>	<i>Assy Lot #</i>	<i>Package</i>	<i>Finish Site</i>	<i>Duration</i>	<i>Samp</i>	<i>Rej</i>	<i>Failure Mechanism</i>
<b>STRESS: EXTERNAL VISUAL</b>							
CY8CMBR3110 (8CP44302AC)	611416411	SZ161 SOIC	UTAC, THAILAND	COMP	461	0	
<b>STRESS: LEAD SCAN</b>							
CY8CMBR3110 (8CP44302AC)	611416411	SZ161 SOIC	UTAC, THAILAND	COMP	461	0	
<b>STRESS: TAPE PEEL BACK FORCE TEST</b>							
CY8CMBR3110 (8CP44302AC)	611416411	SZ161 SOIC	UTAC, THAILAND	COMP	30	0	



## Reliability Test Data QTP #:160804

<i>Device</i>	<i>Assy Lot #</i>	<i>Package</i>	<i>Finish Site</i>	<i>Duration</i>	<i>Samp</i>	<i>Rej</i>	<i>Failure Mechanism</i>
<b>STRESS: EXTERNAL VISUAL</b>							
CYPD2103 (7CP64100AC)	611531363	LH14A,DFN	UTAC,THAILAND	COMP	2991	0	
<b>STRESS: LEAD SCAN</b>							
CYPD2103 (7CP64100AC)	611531363	LH14A,DFN	UTAC,THAILAND	COMP	2991	0	
<b>STRESS: TAPE PEEL BACK FORCE TEST</b>							
CYPD2103 (7CP64100AC)	611531363	LH14A,DFN	UTAC,THAILAND	COMP	30	0	



## Reliability Test Data QTP #:160802

<i>Device</i>	<i>Assy Lot #</i>	<i>Package</i>	<i>Finish Site</i>	<i>Duration</i>	<i>Samp</i>	<i>Rej</i>	<i>Failure Mechanism</i>
<b>STRESS: EXTERNAL VISUAL</b>							
CY14B256LA (7C1418B8CC)	611535359P1	SZ323, SOIC	UTAC,THAILAND	COMP	1000	0	
<b>STRESS: LEAD SCAN</b>							
CY14B256LA (7C1418B8CC)	611535359P1	SZ323, SOIC	UTAC,THAILAND	COMP	926	0	
<b>STRESS: TAPE PEEL BACK FORCE TEST</b>							
CY14B256LA (7C1418B8CC)	611535359P1	SZ323, SOIC	UTAC,THAILAND	COMP	30	0	





## Document History Page

Document Title: QTP# 160802: 32L SOIC PACKAGE (300 MILS) FINISH SITE UTAC, THAILAND LIMITED (UTL)  
Document Number: 002-11850

Rev.	ECN No.	Orig. of Change	Description of Change
**	5186879	JYF	Initial spec release.