



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

## PRODUCT CHANGE NOTIFICATION

**PCN:** PCN192102

**Date:** May 23, 2019

**Subject:** Qualification of ASE Kaohsiung (ASE-KH) as an Additional Bumping and Backend Process Site for Select WLCSP Products

**To:**

**Change Type:** Major

### Description of Change:

Cypress announces the qualification of Advanced Semiconductor Engineering Inc. (ASE-KH, No.47, Kaifa Road, N.E.P.Z. Kaohsiung City 811, Taiwan, R.O.C.) as an additional bumping and backend process site for select WLCSP products. ASE-KH is Cypress' existing manufacturing site for many other WLCSP products in high volume production mode.

The WLCSP products are bumped at ASE-KH using the following Bill of Materials:

Material	ASE-KH BOM	DECATECH BOM
Passivation	PBO (HD8820)	PBO (HD8820)
RDL	Cu, 4um	Cu, 4um
UBM Seed Layer	Ti, 1000A	Ti, 1000A
UBM Seed Layer	Cu, 2000A	Cu, 2000A
UBM	Cu, 8.9um (before etch) or 8.6um (post etch)	Cu, 9um (before etch) or 8.6um (post etch)
Solder Bump	95.5Sn/4.0Ag/0.5Cu	95.5Sn/4.0Ag/0.5Cu

### 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: 25

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:**

These products have been qualified through a series of tests documented in the Qualification Test Plan QTP#191401. This qualification report can be found as an attachment to this PCN or by visiting [www.cypress.com](http://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 ASE-KH 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 ASE-KH 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](mailto:pcn_adm@cypress.com).

Sincerely,

Cypress PCN Administration

Item	Marketing Part Number	Sample Order Part Number	Package	Sample Availability
1	CY8C4024FNI-S402T	CY8C4024FNI-S402TKG	25-Ball WCLSP (2.02X1.93X0.48MM)	May-19
2	CY8C4024FNI-S412T	CY8C4024FNI-S412TKG	25-Ball WCLSP (2.02X1.93X0.48MM)	May-19
3	CY8C4025FNI-S402T	CY8C4025FNI-S402TKG	25-Ball WCLSP (2.02X1.93X0.48MM)	Subject to leadtime
4	CY8C4025FNI-S412T	CY8C4025FNI-S412TKG	25-Ball WCLSP (2.02X1.93X0.48MM)	Subject to leadtime
5	CY8C4045FNI-DS402T	CY8C4045FNI-DS402TKG	25-Ball WCLSP (2.07x2.11x0.55MM)	Subject to leadtime
6	CY8C4045FNI-S412T	CY8C4045FNI-S412TKG	25-Ball WCLSP (2.02X1.93X0.48MM)	Subject to leadtime
7	CY8C4124FNI-443T	CY8C4124FNI-443TKG	35-Ball WCLSP (3.23X2.10X0.55MM)	Subject to leadtime
8	CY8C4124FNI-S403T	CY8C4124FNI-S403TKG	35-Ball WCLSP (2.582X2.097X0.482MM)	Subject to leadtime
9	CY8C4124FNI-S413T	CY8C4124FNI-S413TKG	35-Ball WCLSP (2.582X2.097X0.482MM)	Subject to leadtime
10	CY8C4124FNI-S433T	CY8C4124FNI-S433TKG	35-Ball WCLSP (2.582X2.097X0.482MM)	Subject to leadtime
11	CY8C4125FNI-483T	CY8C4125FNI-483TKG	35-Ball WCLSP 3.23X2.10X0.55MM	Subject to leadtime
12	CY8C4125FNI-S413T	CY8C4125FNI-S413TKG	35-Ball WCLSP (2.582X2.097X0.482MM)	May-19
13	CY8C4125FNI-S423T	CY8C4125FNI-S423TKG	35-Ball WCLSP (2.582X2.097X0.482MM)	Subject to leadtime
14	CY8C4125FNI-S433T	CY8C4125FNI-S433TKG	35-Ball WCLSP (2.582X2.097X0.482MM)	Subject to leadtime
15	CY8C4146FNI-S423T	CY8C4146FNI-S423TKG	35-Ball WCLSP (2.582X2.097X0.482MM)	Subject to leadtime
16	CY8C4146FNI-S433T	CY8C4146FNI-S433TKG	35-Ball WCLSP (2.582X2.097X0.482MM)	May-19
17	CY8C4244FNI-443T	CY8C4244FNI-443TKG	35-Ball WCLSP (3.23X2.10X0.55MM)	Subject to leadtime
18	CY8C4245FNI-483T	CY8C4245FNI-483TKG	35-Ball WCLSP (3.23X2.10X0.55MM)	Subject to leadtime
19	CY8C4245FNI-DS402T	CY8C4245FNI-DS402TKG	25-Ball WCLSP (2.07x2.11x0.55MM)	Subject to leadtime
20	CY8C4246FNI-DS402T	CY8C4246FNI-DS402TKG	25-Ball WCLSP (2.07x2.11x0.55MM)	Subject to leadtime
21	CY8C4724FNI-S402T	CY8C4724FNI-S402TKG	25-Ball WCLSP (2.02X1.93X0.48MM)	Subject to leadtime
22	CY8C4725FNI-S402T	CY8C4725FNI-S402TKG	25-Ball WCLSP (2.02X1.93X0.48MM)	Subject to leadtime
23	CY8C4744FNI-S402T	CY8C4744FNI-S402TKG	25-Ball WCLSP (2.02X1.93X0.48MM)	Subject to leadtime
24	CY8C4745FNI-S402T	CY8C4745FNI-S402TKG	25-Ball WCLSP (2.02X1.93X0.48MM)	Subject to leadtime
25	CY8C4745FNI-S412T	CY8C4745FNI-S412TKG	25-Ball WCLSP (2.02X1.93X0.48MM)	Subject to leadtime