

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

PRODUCT CHANGE NOTIFICATION

Subject: Qualification of Cypress Thailand as an Additional Assembly Site for Select IoT FBGA

Products

Change Type: Major

Description of Change:

Cypress announces the qualification of Cypress Thailand (BKK- 229, MOO 4, Changwattana Road Pakkred, Nonthaburi 11120 Thailand) as an additional assembly site for select 64-Ball FBGA (7.0x7.0x1.0mm) and 50-Ball FBGA (4.5x4x0.8mm) loT products. Cypress Thailand is an established assembly site for BGA for consumer, industrial and automotive applications. These products are ROHS compliant.

The select 64-Ball FBGA, (7.0x7.0x1.0mm), Pb-Free package is assembled at Cypress Thailand using the following Bill of Materials:

Material	STATS ChipPAC China BOM	Cypress Thailand BOM
Mold Compound	Kyocera KE-G1250LKDS-30	Shinetsu KMC 3580LVA
Substrate	Laminate Substrate	Laminate Substrate-same design and substrate construction as current supplier
Die Attach	Ablebond 2025D	Henkel QMI546
Wire	0.8 mils CuPd	0.8 mils CuPdAu – improved version for better moisture performance
Solder Ball Diameter	0.40mm	0.40mm
Solder Ball Material	96.5Sn/3.0Ag/0.5Cu	96.5Sn/3.0Ag/0.5Cu

The select 50-Ball FBGA, (4.5x4x0.8mm), Pb-Free package is assembled at Cypress Thailand using the following Bill of Materials:

Material	STATS ChipPAC China BOM	Cypress Thailand BOM
Mold Compound	Kyocera KE-G1250LKDS-30	Shinetsu KMC 3580LVA
Substrate	Laminate Substrate	Laminate Substrate-same design and substrate construction as current supplier
Die Attach Film	Ablebond ATB120U	Hitachi HR5104
Wire	0.8 mils CuPd	0.8 mils CuPdAu – improved version for better moisture performance
Solder Ball Diameter	0.25mm	0.25mm
Solder Ball Material	96.5Sn/3.0Ag/0.5Cu	96.5Sn/3.0Ag/0.5Cu

Benefit of Change:

Qualification of alternate manufacturing sites is part of Cypress' continuous improvement in our flexible manufacturing initiative providing Cypress with the added capability to meet upside market demand, reduce business continuity risk, and ensure consistent and reliable delivery to customers in dynamic, changing market conditions as well as enhanced capability for unit level traceability.

Part Numbers Affected: 11

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 packages have been qualified through a series of tests documented in the Qualification Test Plans QTP#184113 for 64-Ball FBGA and QTP#184201 for 50-Ball FBGA. These qualification reports can be found as attachments to this PCN.

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 sample ordering part numbers. Samples are subject to lead times of 30 days. 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 the affected part numbers in the attached file will be assembled at Cypress Thailand 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:

The select 64-Ball FBGA (7.0x7.0x1.0mm) and 50-Ball FBGA (4.5x4x0.8mm) IoT products assembled at Cypress Thailand carry enhanced traceability which allows each unit to be traceable to specific Assembly equipment used to process that unit. The traceability is enabled using a serial number, called "unit code" which is the last additional line of marking to the current top mark. The unit code will allow for faster response time to our customers.

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

Item Marketing Part Number

- 1 CYW20730A1KFBG
- 2 CYW20730A1KFBGT
- 3 CYW20730A2KFBG
- 4 CYW20730A2KFBGT
- 5 CYW20702B0KWFBG
- 6 CYW20702B0KWFBGT
- 7 CYW20705B0KWFBG
- 8 CYW20705B0KWFBGT
- 9 CYW20705A1KWFBGT
- 10 CYW20702A1KWFBG
- 11 CYW20702A1KWFBGT