

PRODUCT CHANGE NOTIFICATION

PCN: PCN210101

Date: January 08, 2021

Subject: Qualification of Greatek Electronics Inc. as an Alternate Assembly Site for Select 16-Lead TSSOP Package

To: PCN SALES OI ELECTRICS cy-sales@teldevice.co.jp

Description of Change:

Cypress announces the qualification of Greatek Electronics Inc., Taiwan located at No. 136, Gong-Yi Rd., Zhunan Township, Miaoli County 350, Taiwan, as an alternate assembly site for select Memory products offered in 16-Lead TSSOP package.

These products are currently processed at Orient Semiconductor Electronics (OSET) of Cypress subcontractor in Taiwan, Amkor Philippines (ATP) of Cypress subcontractor in Philippines and IFX Cypress Manufacturing Limited (CML) in Philippines.

Greatek is certified by international quality and safety standards, namely, ISO 9001, IATF 16949, ISO 14001, and ISO 26262. These certificates, along with their Sony Green Partnership certificate, can be viewed on their corporate web site: <u>http://www.greatek.com.tw/</u>

BOM Comparison:

The 16-Lead TSSOP package will be assembled at Greatek using an industry standard set of Bill of Materials (BOM). Please see table below for a comparison of BOM between Greatek and other assembly sites.

The 16-Lead TSSOP package is assembled at Greatek using the following Bill of Materials (BOM):

| Material | Greatek BOM | OSET BOM | IFX CML BOM | Amkor BOM |
|------------------------|-----------------------|---|-----------------|-----------------|
| Leadframe | Cu Leadframe | Cu/PPF Leadframe | PPF Leadframe | Cu Leadframe |
| Lead finish | Pure Sn | Pure Tin/ NiPdAu | NiPdAu | Pure Tin |
| Die Attach Material | Showa Denko EN4900 | Ablestik 8340, Yizbond 9246, Sumitomo CRM-1076, Showa Denko EN4900 | Henkel QMI509 | Ablestik 8290 |
| Wire type | 0.8mil CuPdAu | 0.8 mil Au wire | 0.9 mil Au wire | 0.8 mil Cu wire |

| | wire | 1.0 mil Au wire | 0.8 mil CuPdAu | 1.0 mil Au wire |
|----------|-----------|-----------------|----------------|-----------------|
| | | 0.8 mil Cu wire | wire | |
| Mold | Sumitomo | Showa Denko | Kyocera KE- | Sumitomo EME- |
| Compound | EME-G700H | CEL9200HF, | G3000DA | G700 |
| | | Sumitomo G631, | | |
| | | Sumitomo G620B | | |

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: 38

See the attached 'Affected Parts List' file for a list of all part numbers affected by this change. Note that any new parts introduced after the publication of this PCN will be assembled at Greatek.

Qualification Status:

Greatek has been qualified through a series of tests documented in the Qualification Test Plan QTP#202047004. This qualification report can be found as an attachment to this PCN or by visiting <u>www.cypress.com</u> and typing the QTP number in the keyword search window.

Sample Status:

Samples are available now, unless there is an indication that the sample ordering part numbers are subject to lead times. 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 sample ordering part numbers.

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 notification.

Approximate Implementation Date:

Effective immediately upon customer approval, or 90 days from the date of this notification, whichever comes first, shipments on part numbers in the attached file will be primarily sourced from Greatek.

Anticipated Impact:

Products assembled at Greatek 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 this change against current application notes, system design considerations and customer environment conditions to assess impact (if any) to their application.

Method of Identification:

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

Response Required:

Please acknowledge receipt of this PCN, and submit any sample or additional information requests, within 30 days of this notification. Lack of acknowledgement will constitute acceptance of this change, which will be implemented 90 days from this notification.

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