| Integrated Device Technology, Inc. 6024 Silver Creek Valley Road, San Jose, CA - 95138 | | | | | | |
|---|---|--|---|--|--|--|
| | PRODUCT/PROCESS CHANGE NOTICE (PCN) | | | | | |
| PCN #: A180 Product Affected (R | | Product Mark Back Mark Date Code | INGUISHING CHANGED DEVICES: Lot # will have a "MM" prefix | | | |
| Date Effective: | December 26, 2018 | □ Other | | | | |
| Contact: | IDT PCN DESK | Attachment: | Yes No | | | |
| E-mail: | pcndesk@idt.com | Samples: | Please contact your local sales representative for sample request & availability. | | | |
| DESCRIPTION | AND PURPOSE OF CHANGE: | | | | | |
| □ Wafer Fabric | Die Technology Wafer Fabrication Process Assembly Process This notification is to advise our customers that IDT is adding Carsem (M-site), Malaysi as an alternate assembly facility. | | | | | |
| □ Equipment■ Material | Equipment There is no change to the moisture performance rating | | | | | |
| | | | | | | |
| Data SheetOther | | | 1 | | | |
| | /QUALIFICATION SUMMARY: s been successfully completed. There is no chan | ge in MSL rating. | | | | |
| IDT records ind to grant approva it will be assume IDT reserves the | CKNOWLEDGMENT OF RECEIPT: icate that you require written notification of this il or request additional information. If IDT does n ed that this change is acceptable. e right to ship either version manufactured after t rsion has been depleted. | not receive acknowled | lgement within 30 days of this notice | | | |
| Customer: | | roval for shipmer | nts prior to effective date. | | | |
| Name/Date: | E-Mail Add | ress: | | | | |
| Title: | Phone# /Fax | #: | | | | |
| CUSTOMER C | COMMENTS: | | | | | |
| | | | | | | |
| | LEDGMENT OF RECEIPT: | | | | | |
| RECD. BY: | Г | DATE | | | | |



Integrated Device Technology, Inc. 6024 Silver Creek Valley Road, San Jose, CA - 95138

PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT 1 - PCN # : A1809-02

PCN Type: Alternate Assembly Location & Change of material sets

Data Sheet Change: N/A

Detail Of Change:

This notification is to advise our customers that IDT is adding Carsem (M site), Malaysia as an alternate assembly facility.

The material set details of the current and alternate Assembly location are shown in the tables below. The die attach, mold compound and bonding wire used at the alternate assembly site are qualified IDT materials. There is no change from the existing qualified lead frame material and lead finish for this alternate assembly site.

SSOP - Qualified Material Sets, by Assembly Subcontractor

| | Existing | Alternate | | |
|----------------------------|----------------------------|----------------------------|--|--|
| Material Set / Assembly | ATP - Amkor, Philippines | CRSM - Carsem, Malaysia | | |
| Die Attach | Ablestik 8290 | QMI519 | | |
| Bonding Wire | Gold wire & Copper wire | Gold wire & Copper wire | | |
| Mold Compound | EME-G600 | CEL8240HF10LXC | | |



Integrated Device Technology, Inc. 6024 Silver Creek Valley Road, San Jose, CA - 95138

PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT 1 - PCN # : A1809-02

Qualification Information and Qualification Data:

| Affected Packages: | SSOP-20, 28 |
|--------------------|---|
| Assembly Material: | The affected package type is using the respective subcon standard materials as shown on page 1 of this attachment. Qualification testing was completed on the worse case package. |

Qual Plan & Results: Tests are in accordance with JEDEC47 recommended tests

Qualification Vehicle: SSOP-28 (3 lots Gold Wire & 3 lots Copper Wire)

| | | Test Results (Rej / SS) | | | | | |
|---|-----------------------------|-------------------------|-------|-------|-------------|-------|-------|
| Test Description | Test Method | Gold Wire | | | Copper Wire | | |
| | | Lot 1 | Lot 2 | Lot 3 | Lot 1 | Lot 2 | Lot 3 |
| * Temperature Cycling (-55°C to 125°C, 700 cycles) | JESD22-A104 | 0/25 | 0/25 | 0/25 | 0/25 | 0/25 | 0/25 |
| * HAST - biased (130 °C/85% RH, 96 Hrs) | JESD22-A110 | 0/25 | 0/25 | 0/25 | 0/25 | 0/25 | 0/25 |
| High Temperature Storage Bake (150°C, 1000 Hrs) | JESD22-A103 | 0/25 | 0/25 | 0/25 | 0/25 | 0/25 | 0/25 |
| Ball Shear Test | JESD22-B116 | 0/5 | 0/5 | 0/5 | 0/5 | 0/5 | 0/5 |
| Bond Pull Test | IDT Spec MAC- 3010 | 0/5 | 0/5 | 0/5 | 0/5 | 0/5 | 0/5 |
| X Ray | IDT Spec. MAC- 3012 | 0/45 | 0/45 | 0/45 | 0/45 | 0/45 | 0/45 |
| Moisture Sensitivity Level, MSL | J-STD-20 / MSL 1, 260 °C | 0/25 | 0/25 | 0/25 | 0/25 | 0/25 | 0/25 |

* Tests were subjected to Preconditioning per JESD22-A113 prior to stress test



Integrated Device Technology, Inc. 6024 Silver Creek Valley Road, San Jose, CA - 95138

PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT 2 - PCN # : A1809-02

Affected Part Numbers

| Part Number | Part Number | Part Number | Part Number |
|-----------------|-----------------|-----------------|-----------------|
| 49FCT20805PYGI | 49FCT805APYGI | 74FCT245CTPYG | 74FCT3807EPYGI8 |
| 49FCT20805PYGI8 | 49FCT805APYGI8 | 74FCT245CTPYG8 | 74FCT3807PYG |
| 49FCT3805APYG | 49FCT805CTPYG | 74FCT3244APYG | 74FCT3807PYG8 |
| 49FCT3805APYG8 | 49FCT805CTPYG8 | 74FCT3244APYG8 | 74FCT3807PYGI |
| 49FCT3805APYGI | 49FCT805PYG | 74FCT3244PYG | 74FCT3807PYGI8 |
| 49FCT3805APYGI8 | 49FCT805PYG8 | 74FCT3244PYG8 | 74FCT3807SPYGI |
| 49FCT3805BPYG | 49FCT805PYGI | 74FCT373ATPYG | 74FCT3807SPYGI8 |
| 49FCT3805BPYG8 | 49FCT805PYGI8 | 74FCT373ATPYG8 | 74FCT3811PYGI |
| 49FCT3805BPYGI | 74FCT20807PYGI | 74FCT373CTPYG | 74FCT3811PYGI8 |
| 49FCT3805BPYGI8 | 74FCT20807PYGI8 | 74FCT373CTPYG8 | 8T33FS314PYGI |
| 49FCT3805DPYGI | 74FCT240ATPYG | 74FCT3807APYG | 8T33FS314PYGI8 |
| 49FCT3805DPYGI8 | 74FCT240ATPYG8 | 74FCT3807APYG8 | 9DB633AFILF |
| 49FCT3805EPYGI | 74FCT240CTPYG | 74FCT3807APYGI | 9DB633AFILFT |
| 49FCT3805EPYGI8 | 74FCT240CTPYG8 | 74FCT3807APYGI8 | 9DB633AFLF |
| 49FCT3805PYG | 74FCT244ATPYG | 74FCT3807DPYGI | 9DB633AFLFT |
| 49FCT3805PYG8 | 74FCT244ATPYG8 | 74FCT3807DPYGI5 | LDS6107PYGI |
| 49FCT3805PYGI | 74FCT244CTPYG | 74FCT3807DPYGI8 | LDS6107PYGI8 |
| 49FCT3805PYGI8 | 74FCT244CTPYG8 | 74FCT3807EPYG | LV810FILF |
| 49FCT805APYG | 74FCT245ATPYG | 74FCT3807EPYG8 | LV810FILFT |
| 49FCT805APYG8 | 74FCT245ATPYG8 | 74FCT3807EPYGI | |