



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

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **TP1910-02** Date: October 14, 2019
 Product Affected: Please refer to Page 2 for affected part numbers
 Date Effective: January 14, 2020

MEANS OF DISTINGUISHING CHANGED DEVICES:

- Product Mark
- Back Mark
- Date Code
- Other

Orderable Part Number with "C"

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DESCRIPTION AND PURPOSE OF CHANGE:

- Die Technology
- Wafer Fabrication Process
- Assembly Process
- Equipment
- Material
- Testing
- Manufacturing Site
- Data Sheet - PCIe Filtered Phase Jitter Parameter Update
- Other - Die Revision Change

This notification is to advise our customers of a top metal change to enhance Spread Performance and increase Spread Spectrum Clocking (SSC) flexibility.

Description of Changes:

1. Spread performance is enhanced to meet PCIe Gen5 specification.
2. Logic change on the spread enabling pin (SS_EN_tri): This change allows spread spectrum transition without system reset. Shown below is the original and updated logic table. Adding non spread at CC (Common Clock) mode allows switching between non spread CC and spread on CC operations.

| Original Spread Profile Logic | | | |
|-------------------------------|---------|----------|----------------------|
| \wedge vSS_EN_tri | B1[4:3] | Spread % | Notes |
| 0 | 00 | 0 | PCIe SRNS mode |
| M (VDD/2) | 01 | -0.25 | PCIe CC or SRIS mode |
| - | 10 | N/A | Reserved |
| 1 | 11 | -0.5 | PCIe CC or SRIS mode |

| Updated Spread Profile | | | |
|------------------------|---------|----------|----------------------|
| \wedge vSS_EN_tri | B1[4:3] | Spread % | Notes |
| 0 | 00 | 0 | PCIe SRNS mode |
| - | 01 | -0.25 | PCIe CC or SRIS mode |
| M (VDD/2) | 10 | 0 | PCIe CC or SRIS mode |
| 1 | 11 | -0.5 | PCIe CC or SRIS mode |

A new orderable part number will distinguish this change. The current part number will be discontinued as of the effective date on this notice.

RELIABILITY/QUALIFICATION SUMMARY:

Qualification and characterization have been successfully completed.

CUSTOMER ACKNOWLEDGMENT OF RECEIPT:

IDT records indicate that you require written notification of this change. Please E-Mail to grant approval or request additional information. If IDT does not receive acknowledgement within 30 days of this notice it will be assumed that this change is acceptable.



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Affected Parts:

| Current Part Number | New Part Number |
|---------------------|-----------------|
| 9FGL0241BKILF | 9FGL0241CKILF |
| 9FGL0241BKILFT | 9FGL0241CKILFT |
| 9FGL0251BKILF | 9FGL0251CKILF |
| 9FGL0251BKILFT | 9FGL0251CKILFT |
| 9FGL0441BKILF | 9FGL0441CKILF |
| 9FGL0441BKILFT | 9FGL0441CKILFT |
| 9FGL0451BKILF | 9FGL0451CKILF |
| 9FGL0451BKILFT | 9FGL0451CKILFT |
| 9FGL0641BKILF | 9FGL0641CKILF |
| 9FGL0641BKILFT | 9FGL0641CKILFT |
| 9FGL0651BKILF | 9FGL0651CKILF |
| 9FGL0651BKILFT | 9FGL0651CKILFT |
| 9FGL0841BKILF | 9FGL0841CKILF |
| 9FGL0841BKILFT | 9FGL0841CKILFT |
| 9FGL0851BKILF | 9FGL0851CKILF |
| 9FGL0851BKILFT | 9FGL0851CKILFT |
| 9SQL4952BNLGI | 9SQL4952CNLGI |
| 9SQL4952BNLGI8 | 9SQL4952CNLGI8 |
| 9SQL4954BNLGI | 9SQL4954CNLGI |
| 9SQL4954BNLGI8 | 9SQL4954CNLGI8 |
| 9SQL4958BNDGI | 9SQL4958CNDGI |
| 9SQL4958BNDGI8 | 9SQL4958CNDGI8 |