



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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**PCN# TP1910-02**

**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