



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

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: N1205-01                      Date: May 22, 2012  
Product Affected:  
813N252AK(I)-02LF, 813N2532AK(I)LF, 813N322AK(I)-02LF

**MEANS OF DISTINGUISHING CHANGED DEVICES:**

Product Name and Top Mark

The part# will change for revision C. Refer to the part# list detail on Attachment 1.

Date Effective: August 22, 2012

Contact: Richard Gan

Title: Marketing Engineer

Attachment:

Yes

No

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Samples: Samples are available now.

**DESCRIPTION AND PURPOSE OF CHANGE:**

- Die Technology
- Wafer Fabrication Process
- Assembly Process
- Equipment
- Material
- Testing
- Manufacturing Site
- Data Sheet
- Other

This change is advise our customers of a silicon die revision. The current die revision A will be changed to revision C.

Refer to Attachment 1 for the details of this change.

**RELIABILITY/QUALIFICATION SUMMARY:**

There is no expected change in quality or reliability.

**CUSTOMER ACKNOWLEDGMENT OF RECEIPT:**

IDT records indicate that you require written notification of this change. Please use the acknowledgement below or 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.

IDT reserves the right to ship either version manufactured after the process change effective date until the inventory on the earlier version has been depleted.

Customer: \_\_\_\_\_  *Approval for shipments prior to effective date.*

Name/Date: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Title: \_\_\_\_\_ Phone# /Fax# : \_\_\_\_\_

**CUSTOMER COMMENTS:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**IDT ACKNOWLEDGMENT OF RECEIPT:**

RECD. BY: \_\_\_\_\_

DATE: \_\_\_\_\_



## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT 1 - PCN # : N1205-01

**PCN Type:** Die Revision

**Data Sheet Change:** N/A

**Detail Of Change:**

The current IDT part 813N252AK(I)-02LF, 813N2532AK(I)LF, 813N322AK(I)-02LF are from the A die revision. IDT has made a Rev C silicon to improve the performance and compensate for variation in the process. This die revision C will be shipped as the replacement part #'s as shown in the table below.

Revision C has the following design fixes and improvements:

- 1) Linearity of the VCXO frequency vs. control voltage curve was improved.
- 2) High Jitter issue. This issue was caused by set-up time violation on the clock input to the synchronous output divider. Rev A was sensitive to process variation and Rev C has the following fixes to ensure set-up time is met across process variation.
  - Increased the strength of divider Flip Flop
  - Increased the strength of selector
  - Improved the data-to-clock set up time

There is no change to the electrical or thermal specification and no pinout changes associated with this die change.

<u>CURRENT PART #</u>	<u>REVISION C REPLACEMENT PART#</u>
813N252AK-02LF	813N252CK-02LF
813N252AKI-02LF	813N252CKI-02LF
813N2532AKLF	813N2532CKLF
813N2532AKILF	813N2532CKILF
813N322AK-02LF	813N322CK-02LF
813N322AKI-02LF	813N322CKI-02LF