PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: N1701-01  Date: February 2, 2017

MEANS OF DISTINGUISHING CHANGED DEVICES:

- Product Mark Prefix character on date code line as shown on Attachment 1
- Back Mark
- Date Code
- Other

Product Affected: 8V97051NLGI  8V97051NLGI8  8V97051NLGI/W

Date Effective: May 2, 2017

Contact: TSD Clock Team  Attachment: Yes  No

E-mail: clocks@idt.com  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 - Die Revision Change

- This notice is to advise our customers that a minor design change was made to the affected part numbers listed above.
- There is no change to the orderable part number or data sheet specifications.
- The change improves device robustness for low temperature operation. On other similar devices, a circuit marginality may on rare occasions cause the device to power up in an undesirable state in low temperature environments. Pro-active measures to implement the same resolution on this device, which uses a similar circuit, have been taken. The failing power-up condition would potentially be seen at cold temperature as for other similar devices even though none has been observed so far. Possible failure modes related to this potential low temperature fault include: no output switching, switching at an incorrect frequency, no access to the registers, and wrong configuration in the digital PLL blocks. While the probability of this fault being manifest in the current design is low, the above mentioned design change will completely eliminate the possibility of this fault occurring.

There are no AC or DC changes related to this design change.

The current version of this device will be discontinued as of the effective date on this notice.

RELIABILITY/QUALIFICATION SUMMARY:

There is no change in die technology/process and no performance change based on device characterization result. Design improvement has also been validated through both bench and ATE testing.

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. The earlier version will be discontinued after the effective date.

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: ___________________________
PCN Type: Die Revision Change

Data Sheet Change: No

Detail of Change: The change improves device robustness for low temperature operation. On other similar devices, a circuit marginality may on rare occasions cause the device to power up in an undesirable state in low temperature environments. Pro-active measures to implement the same resolution on this device, which uses a similar circuit, have been taken. The failing power-up condition would potentially be seen at cold temperature as for other similar devices even though none has been observed so far. Possible failure modes related to this potential low temperature fault include: no output switching, switching at an incorrect frequency, no access to the registers, and wrong configuration in the digital PLL blocks. While the probability of this fault being manifest in the current design is low, the above mentioned design change will completely eliminate the possibility of this fault occurring.

Example of Prefix character change in datecode line

<table>
<thead>
<tr>
<th>From: Y</th>
<th>To: YA</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Image of datecode]</td>
<td>[Image of datecode]</td>
</tr>
</tbody>
</table>

From: IDT 8V97051 NLGI YYYWN To: IDT 8V97051 NLGI YAYYWN