



# CUSTOMER ADVISORY

## ADV1833

### Datasheet Update for Stratix®V Devices

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#### Change Description:

Intel Programmable Solutions Group (“Intel PSG”, formerly Altera) is notifying customers of a documentation update for Stratix V devices. The minimum Data Hold time ( $t_{DH}$ ) timing specification for Active Serial (AS) configuration scheme has been updated.

**Table 1: Minimum  $t_{DH}$  Specification**

Speed Grade	Change From	Change To <sup>1</sup>
-1	0ns	2.9ns
-2	0ns	3.4ns
-3	0ns	3.7ns
-4	0ns	3.9ns

Note 1: Applies to Commercial and Industrial grade

The  $t_{DH}$  spec is stipulated in Table 53 of the datasheet. Please review the revision history for all other updates to the datasheet. The Stratix V device datasheet can be found here:

[https://www.intel.com/content/dam/www/programmable/us/en/pdfs/literature/hb/stratix-v/stx5\\_53001.pdf](https://www.intel.com/content/dam/www/programmable/us/en/pdfs/literature/hb/stratix-v/stx5_53001.pdf)

#### Recommended Action:

Customers should review their board design against the updated Stratix V minimum  $t_{DH}$  spec, otherwise configuration may fail.

Customers can calculate the hold time required for Active Serial configuration scheme, as mentioned in the 'Evaluating Data Setup and Hold Timing Slack' section of AN822 to evaluate the hold time slack on the board. AN822 can be found here:

<https://www.intel.com/content/dam/www/programmable/us/en/pdfs/literature/an/an822.pdf>

For any additional questions, please contact your local Field Applications Engineer (FAE) or submit a Service Request at the [My Intel](#) support page.

### Products Affected:

All Stratix V Devices

The list of affected OPNs can be downloaded in Excel form:

<https://www.intel.com/content/dam/www/programmable/us/en/pdfs/literature/pcn/adv1833-opn-list.xlsx>

### Reason for Change:

It is necessary to update the datasheet with the new minimum  $t_{DH}$  spec, as the previous spec was determined to be inaccurate. There is no change to the Stratix V product silicon and materials.

### Change Implementation

Table 2

<b><i>Milestone</i></b>	<b><i>Date</i></b>
Availability of Stratix V Datasheet Update	Now

## Contact

For more information, please contact your local Field Applications Engineer (FAE) or submit a Service Request at the [My Intel](#) support page.

## Customer Notifications Subscription

Customers that have subscribed to Intel PSG's customer notification mailing list will receive the ADV document automatically via email.

If you would like to receive customer notifications by email, please subscribe to our customer notification mailing list at:

<https://www.intel.com/content/www/us/en/programmable/my-intel/mail-emailsub/technical-updates.html>

## Revision History

Date	Rev	Description
1/25/2019	1.0.0	Initial Release

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