CUSTOMER ADVISORY

ADV2012

Intel® Stratix® 10 Device Datasheet Update

Description:

Intel® is notifying customers of an important documentation update for Intel Stratix® 10 devices.

Following are the most recent changes listed in the document revision history of the Intel Stratix 10 device datasheet-

- Mentioned that the specifications for 1SG040HF35 and 1SX040HF35 devices are still preliminary in the Datasheet Status for Intel Stratix 10 Devices table.
- Updated the Absolute Maximum Ratings for Intel Stratix 10 Devices table.
  - Added VCCIO3C and VCCIO3D specifications.
  - Updated the description for VCCIO.
  - Added VI specifications for 3.3 V I/O.
- Added a new table: Maximum Allowed Overshoot During Transitions for Intel Stratix 10 Devices (for 3.3 V I/O).
- Updated the Recommended Operating Conditions for Intel Stratix 10 Devices table.
  - Added VCCIO3C, VCCIO3D, and VI (for 3.3 V I/O) specifications.
  - Updated the description for VCCIO.
  - Updated note to TJ specification for Industrial.
- Added II_3.3VIO specifications in the I/O Pin Leakage Current for Intel Stratix 10 Devices table.
- Added CIO_3.3VIO specifications in the Pin Capacitance for Intel Stratix 10 Devices table.
- Added RPU specifications for 3.3 V I/O in the Internal Weak Pull-Up Resistor Values for Intel Stratix 10 Devices table.
- Added 3.3 V LVTTL, 3.3 V LVC莫斯, 3.0 V LVTTL, and 3.0 V LVCMOS specifications for 1SG040F35 or 1SX040F35 devices I/O bank 3C only in the

...

- Updated the description in the DPA Lock Time Specifications for Intel Stratix 10 Devices table.
- Added a note to VICM (AC coupled) in the E-Tile Receiver Specifications table.
- Added specifications for Intel Stratix 10 TX 400 devices and updated specifications for Intel Stratix 10 GX 400, SX 400, GX 1650, GX 2100, SX 1650, and SX 2100 devices in the following tables:
  - Configuration Bit Stream Sizes for Intel Stratix 10 Devices (No changes to the Intel Quartus® Prime software. Bitstream size generated by the Intel Quartus® Prime software is correct.)
  - Maximum Configuration Time Estimation for Intel Stratix 10 Devices (Avalon-ST)
  - Maximum Configuration Time Estimation for Intel Stratix 10 Devices (AS and SD/MMC)

The Intel Stratix 10 device datasheet can be found here:


**Recommended Actions:**

Customers are requested to take note of the changes and determine the impact on their designs.

For questions or support, please contact your local Field Applications Engineer (FAE), or submit a question or request at the My Intel support page, log-in via: https://www.intel.com/content/www/us/en/my-intel/fpga-sign-in.html

**Products Affected:**

All Intel Stratix 10 devices

The list of affected part numbers (OPNs) can be downloaded in Excel form: https://www.intel.com/content/dam/www/programmable/us/en/pdfs/literature/pcn/adv2012-opn-list.xlsx
Reason for Change:

Addition and clarification of certain device specifications based on latest available data and characterization. There is no change to the Intel Stratix 10 device silicon and materials.

Change Implementation:

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milestone</td>
</tr>
<tr>
<td>Availability of Intel Stratix 10 device datasheet update</td>
</tr>
</tbody>
</table>

Contact:

For more information, please contact your local Field Applications Engineer (FAE), or submit a question or request at the My Intel support page, log-in via: https://www.intel.com/content/www/us/en/my-intel/fpga-sign-in.html

Customer Notifications Subscription:

Customers that subscribe to the Intel FPGA customer notification mailing list will receive the notifications automatically via email.

If you would like to receive Intel FPGA customer notifications by email, you can register to the Intel FPGA program and set up your subscription at: https://www.intel.com/content/www/us/en/programmable/my-intel/malemailsub/technical-updates.html

Revision History

<table>
<thead>
<tr>
<th>Date</th>
<th>Rev</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/20/2020</td>
<td>1.0.0</td>
<td>Initial Release</td>
</tr>
</tbody>
</table>

©2020 Intel Corporation. All rights reserved. Intel, the Intel logo, Altera, Arria, Cyclone, Enpirion, Max, Nios, Quartus and Stratix words and logos are trademarks of Intel Corporation or its subsidiaries in the U.S. and/or other countries. Other marks and brands may be claimed as the property of others. Intel reserves the right to make changes to any products and services at any time without notice. Intel assumes no responsibility or liability arising out of the application or use of any information, product, or service described herein except as expressly agreed to in writing by Intel. Intel customers are advised to obtain the latest version of device specifications before relying on any published information and before placing orders for products or services.