



Product Change Notification

Change Notification #: 118093 - 01
Change Title: Intel® Stratix 10 devices,
PCN 118093-01, Software,
Software Updates
Reason for Revision: Updated rows 1 and 3 of
Table 1
Date of Publication: June 3, 2021

Key Characteristics of the Change:

Software

Forecasted Key Milestones:

Availability of patches for all issues in this customer advisory	Now
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Description of Change to the Customer:

Reason for Revision: Updated rows 1 and 3 of Table 1

This is the same change described in ADV2104 Revision 1.1.0 issued on May 28th, 2021.

Intel is notifying customers of important software updates to Intel® Stratix® 10 Devices. Refer to Table 1 for further details and links to KDB articles with recommendations and further actions.

Table 1: Intel® Quartus® Prime Pro Software Fixes

Update Details	Impacted Versions	KDB Article (with patches)
Physical synthesis compiler fix (1) <ul style="list-style-type: none">Seed dependent functional failures in timing clean designs when compiled in impacted versions of the software.Permanent fix implemented in Intel® Quartus® Prime Pro ver 20.2 and above.Patches are available for Intel Quartus Prime Pro ver 18.1, 19.1, 19.2, 19.3, 19.4, and 20.1.	Ver 20.1 and earlier	Why are there seed dependent functional failures in a timing clean design when compiled in the Intel® Quartus® Prime Pro Edition software version 20.1 and earlier?
Physical synthesis compiler fix (2) <ul style="list-style-type: none">Seed dependent functional failures where the registers feeding into and from DSP blocks are stuck in reset status when compiled in impacted versions of the software.Permanent fix implemented in Intel Quartus Prime Pro ver 20.2 and above.	Ver. 20.1	Why are there seed dependent functional failures where the registers feeding into and from DSP blocks stuck in reset status when compiled in the Intel® Quartus® Prime Pro Edition software version 20.1?

<p>Inferred RAM Fix</p> <ul style="list-style-type: none"> RAM data corruption when reading from a Sequential Access Memory (SAM) that is implemented using an inferred True Dual Port RAM or Simple dual port RAM, in impacted versions of the software. Permanent fix implemented in Intel Quartus Prime Pro ver 20.2 and above. Patches are available for Intel Quartus Prime Pro ver 18.1, 19.1, 19.2, 19.3, 19.4, and 20.1. 	Ver 20.1 and earlier	Why is there seed dependent RAM data corruption in designs compiled in the Intel® Quartus® Prime Pro version 20.1 and earlier?
<p>Software Timing Model Fix</p> <ul style="list-style-type: none"> Observe hold slack difference when performing timing analysis using the -force_dat option in Timing Analyzer. Permanent fix implemented in Intel Quartus Prime Pro ver 20.3 and above. 	Ver 20.1 Ver 20.2	Why is there a hold slack difference when performing timing analysis using the -force_dat option in Timing Analyzer?
<p>Mailbox Client Intel Stratix 10 FPGA IP core fix</p> <ul style="list-style-type: none"> Mailbox Client Intel FPGA IP becomes unresponsive or hangs when writing to external QSPI flash memory. Permanent fix implemented in Intel Quartus Prime Pro ver 20.3 and above. 	All versions prior to ver. 20.3	Why does the Mailbox IP become unresponsive or hang when writing to external QSPI flash memory, when using Intel® Stratix® 10 or Intel® Agilix™ devices?
<p>Intel Stratix 10 device Reconfiguration and Partial Reconfiguration fix</p> <ul style="list-style-type: none"> Intel Stratix 10 device reconfiguration and partial reconfiguration intermittent failure when SEU feature is turned ON in the design. 	Ver 20.1 Ver 20.2 Ver 20.3	Is there a known issue for Intel® Stratix® 10 devices when SEU detection is enabled?

Customer Impact of Change and Recommended Action:

For more information, please contact your local Sales representative, 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 / Intel Ordering Codes:

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/adv2104-opn-list.xlsx>

PCN Revision History:

Date of Revision:	Revision Number:	Reason:
February 9, 2021	00	Originally Published PCN
June 3, 2021	01	Updated rows 1 and 3 of Table 1



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Should you have any issues with the timeline or content of this change, please contact the Intel Representative(s) for your geographic location listed below. No response from customers will be deemed as acceptance of the change and the change will be implemented pursuant to the key milestones set forth in this attached PCN.

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