



CUSTOMER ADVISORY

ADV2104

Intel® Stratix® 10 Device Software Updates

This is not a new ADV issuance. This is a revision of the previous ADV2104 release. See Revision History (last page) for details.

Description:

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?

Inferred RAM Fix <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 RAM data corruption in designs using Inferred Dual Port RAMs and compiled in the Intel® Quartus® Prime Pro Edition software version 20.1 and earlier?
Software Timing Model Fix <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?
Mailbox Client Intel Stratix 10 FPGA IP core fix <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® Agilex™ devices?
Intel Stratix 10 device Reconfiguration and Partial Reconfiguration fix <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?

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/adv2104-opn-list.xlsx>

Change Implementation:

Patches for all issues in this customer advisory are available now. Refer to the relevant KDB at the links in Table 1.

Contact:

For more information, please contact your local Sales representative, or submit a question or request at the My Intel support page, log-in via:

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Revision History:

Date	Rev	Description
02/05/2021	1.0.0	Initial Release
05/28/2021	1.1.0	Row 3 of 'Update details' and 'KDB article' in table 1 were updated.

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