

# CUSTOMER ADVISORY ADV2103

# Intel<sup>®</sup> Arria<sup>®</sup> 10 Device and Intel<sup>®</sup> Cyclone<sup>®</sup> 10 Device Software Updates

This is not a new ADV issuance. This is a revision of the previous ADV2103 release. See Revision History (last page) for details.

## Description:

Intel<sup>®</sup> is notifying customers of important software updates to the Intel<sup>®</sup> Arria<sup>®</sup> 10 Devices and Intel<sup>®</sup> Cyclone<sup>®</sup> 10 Devices. Refer to table 1 and table 2 for further details and links to KDB articles with recommendations and further actions.

#### Table 1: Intel<sup>®</sup> Quartus<sup>®</sup> Prime Pro Software Fixes

Update Details	Impacted Versions	KDB Article (with patches)
Physical synthesis compiler fix	Ver 20.1	Why are there seed
<ul> <li>Seed dependent functional failures in timing clean designs when compiled in impacted versions of the software.</li> <li>Permanent fix implemented in Intel<sup>®</sup> Quartus<sup>®</sup> Prime Prover 20.2 and above.</li> <li>Patches are available for Intel Quartus Prime Prover 18.1, 19.1, 19.2, 19.3, 19.4, and 20.1.</li> </ul>	and earlier	dependent functional failures in a timing clean design when compiled in the Intel® Quartus® Prime Pro Edition software version 20.1 and earlier?
<ul> <li>Inferred RAM Fix (1)</li> <li>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.</li> <li>Permanent fix implemented in Intel Quartus Prime Pro ver 20.2 and above.</li> <li>Patches are available for Intel Quartus Prime Pro ver 18.1, 19.1, 19.2, 19.3, 19.4, and 20.1.</li> </ul>	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?

#### Table 2: Intel Quartus Prime Standard Edition Software Fix

Update Details	Impacted Versions	KDB Article (with patches)
<ul> <li>Inferred RAM Fix (2)</li> <li>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.</li> <li>Permanent fix implemented in Intel Quartus Prime Standard edition software ver 20.1 and above.</li> <li>Patches are available for Intel Quartus Prime Standard edition software ver 18.1, and 19.1.</li> </ul>	Ver 19.1 and earlier	Why is there RAM data corruption in designs using Inferred Dual Port RAMs and compiled in the Intel® Quartus® Prime Standard Edition software version 19.1 and earlier?

## Products Affected:

All Intel Arria 10 Devices and Intel Cyclone 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/adv210 3-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 and table 2.

## 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: <u>https://www.intel.com/content/www/us/en/my-intel/fpga-sign-in.html</u>

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### **Revision History**

Date	Rev	Description
03/05/2021	1.0.0	Initial Release
05/28/2021	1.1.0	'Update details' and 'KDB article' in table 1 and table 2 were updated.

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