

# **Mailbox Client Intel® FPGA IP Release Notes**



Version: 2022.09.26

ID: 683754



# **Contents**

Mailbox Client Intel® FPGA IP Release Notes	3
1.1. Mailbox Client Intel FPGA IP v20.2.0	
1.2. Mailbox Client Intel FPGA IP v20.1.2.	
1.3. Mailbox Client Intel FPGA IP v20.1.1	۷
1.4. Mailbox Client Intel FPGA IP v20.1.0	۷
1.5. Mailbox Client Intel FPGA IP v20.0.2	۷
1.6. Mailbox Client Intel FPGA IP v20.0.0	
1.7. Mailbox Client Intel FPGA IP v19.3	
1.8. Intel FPGA Stratix 10 Mailbox Client v17.1	
1.9 Mailhox Client Intel FPGA IP User Guide Archives	6





# 1. Mailbox Client Intel® FPGA IP Release Notes

Intel® FPGA IP versions match the Intel Quartus® Prime Design Suite software versions until v19.1. Starting in Intel Quartus Prime Design Suite software version 19.2, Intel FPGA IP has a new versioning scheme.

The Intel FPGA IP version (X.Y.Z) number can change with each Intel Quartus Prime software version. A change in:

- X indicates a major revision of the IP. If you update the Intel Quartus Prime software, you must regenerate the IP.
- Y indicates the IP includes new features. Regenerate your IP to include these new features.
- Z indicates the IP includes minor changes. Regenerate your IP to include these changes.

#### **Related Information**

- Intel Quartus Prime Design Suite Update Release Notes
- Introduction to Intel FPGA IP Cores
- Mailbox Client Intel FPGA IP User Guide
- Errata for other IP cores in the Knowledge Base

#### 1.1. Mailbox Client Intel FPGA IP v20.2.0

#### Table 1. v20.2.0 2022.09.26

Intel Quartus Prime Version	Description	Impact
22.3	Added LibRSU support with Nios® V processor to use with the secure device manager (SDM).	_

#### 1.2. Mailbox Client Intel FPGA IP v20.1.2

#### Table 2. v20.1.2 2022.03.28

Intel Quartus Prime Version	Description	Impact
22.1	Updated response for <b>CONFIG_STATUS</b> command to include information on the configuration clock source.	Allows configuration of FPGA without a tile refclk present
	Enhanced the interrupt status register (ISR) and interrupt enable register (IER) to add protection for command/response and read/write FIFOs.	at time of configuration.
	Removed mailbox command REBOOT_HPS as this command is unavailable for this IP.	

Intel Corporation. All rights reserved. Intel, the Intel logo, and other Intel marks are trademarks of Intel Corporation or its subsidiaries. Intel warrants performance of its FPGA and semiconductor products to current specifications in accordance with Intel's standard warranty, but 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.



# 1.3. Mailbox Client Intel FPGA IP v20.1.1

# Table 3. v20.1.1 2021.12.13

Intel Quartus Prime Version	Description	Impact
21.4	Updated crypto service-specific parameter name from HAS_OFFLOAD to Enable Crypto Service	_
	Replace safeclib memcpy implementation with generic memcpy in HAL driver.	

# 1.4. Mailbox Client Intel FPGA IP v20.1.0

#### Table 4. v20.1.0 2021.10.04

Intel Quartus Prime Version	Description	Impact
21.3	Added <b>HAS_OFFLOAD</b> parameter to support cryptographic offloading. This feature is only available for Intel Agilex <sup>™</sup> devices.	When set, the IP enables the crypto AXI initiator interface.
	Changed the Release Notes part number from RN-1201 to RN-1259.	-

# 1.5. Mailbox Client Intel FPGA IP v20.0.2

#### Table 5. v20.0.2 2021.03.29

Intel Quartus Prime Version	Description	Impact
21.1	Added support to reset Timer 1 and Timer 2 delay registers during the event of Mailbox Client Intel FPGA IP reset assertion.	No impact in Timer 1 and Timer 2 registers usage in Intel Quartus Prime software version from 20.2 and 20.4.
		You must regenerate the Mailbox Client Intel FPGA IP when moving from Intel Quartus Prime software version 20.4 or earlier to Intel Quartus Prime software version 21.1.
	Added support to enable the connection capability between Mailbox Client Intel FPGA IP IRQ signal and Nios II processor IRQ signal.	You must migrate to Intel Quartus Prime software version 21.1 and regenerate Mailbox Client Intel FPGA IP to enable this feature.

# 1.6. Mailbox Client Intel FPGA IP v20.0.0

#### Table 6. v20.0.0 2020.04.13

Intel Quartus Prime Version	Description	Impact
20.1	Added support for the EOP_TIMEOUT interrupt which indicates that the full command did not include the End of Packet.	You can use these interrupts to handle error detection for
	Added support for the BACKPRESSURE_TIMEOUT interrupt which indicates that an error within the SDM occurred.	incomplete transactions.





# 1.7. Mailbox Client Intel FPGA IP v19.3

# Table 7. v19.3 2019.09.30

Intel Quartus Prime Version	Description	Impact
19.3	Added device support for Intel Agilex devices.	You can now use this IP in Intel Agilex devices.
	Added support for an COMMAND_INVALID interrupt which indicates the command length specified the header does not match the actual command sent.	You can use this interrupt to identify incorrectly specified commands.
	Changed the name of this IP from Intel FPGA Stratix 10 Mailbox Client to Mailbox Client Intel FPGA IP.	This IP now supports both Intel Stratix® 10 and Intel Agilex devices. Use the new name to find this IP in the Intel Quartus Prime software or on the web.
	Added new IP version structure.	The IP version number may change from one Intel Quartus Prime software version to another.

# 1.8. Intel FPGA Stratix 10 Mailbox Client v17.1

#### Table 8. v17.1 2017.10.30

Intel Quartus Prime Version	Description	Impact
17.1	Initial release.	



# 1.9. Mailbox Client Intel FPGA IP User Guide Archives

For the latest and previous versions of this user guide, refer to Mailbox Client Intel FPGA IP User Guide. If an IP or software version is not listed, the user guide for the previous IP or software version applies.

IP versions are the same as the Intel Quartus Prime Design Suite software versions up to v19.1. From Intel Quartus Prime Design Suite software version 19.2 or later, IP cores have a new IP versioning scheme.

