



Intel® Stratix® 10 E-Tile Transceiver Native PHY IP Release Notes



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1. Intel® Stratix® 10 E-Tile Transceiver Native PHY IP Release Notes

If a release note is not available for a specific IP version, the IP has no changes in that version. For information on IP update releases up to v18.1, refer to the *Intel® Quartus® Prime Design Suite Update Release Notes*.

Related Information

- [Intel Quartus Prime Design Suite Update Release Notes](#)
- [E-Tile Transceiver PHY User Guide](#)

1.1. Intel Stratix® 10 E-Tile Transceiver Native PHY IP Release Notes v20.2.0

Table 1. v20.1.0 2020.07.10

Intel Quartus Prime Version	Description	Impact
20.2	Updated the functionality for unused transceiver channels—the Native PHY IP allows you to specify the reference clock pin assignment and reference clock frequency explicitly for each bank with unused channels to be protected in the design.	—

1.2. Intel Stratix® 10 E-Tile Transceiver Native PHY IP Release Notes v20.1.0

Table 2. v20.1.0 2020.06.02

Intel Quartus Prime Version	Description	Impact
20.1	Added design examples which are aligned with these existing presets: <ul style="list-style-type: none"> • Single channel NRZ • Bonded eight channels NRZ • High data rate single transceiver PAM4 • Bonded four transceivers high data rate PAM4 	—



1.3. Intel Stratix® 10 E-Tile Transceiver Native PHY IP Release Notes v19.4.0

Table 3. v19.4.0 2020.01.31

Intel Quartus Prime Version	Description	Impact
19.4	Updated unused transceiver channel protection steps for all four modes	—
19.4	Changed example presets to have lower tx_clkout and rx_clkout frequencies for easier timing closure	—

1.4. Intel Stratix® 10 E-Tile Transceiver Native PHY IP Release Notes v19.3.0

Table 4. v19.3.0 2019.10.11

Intel Quartus Prime Version	Description	Impact
19.3	Enabled reference clock frequencies greater than 500 MHz and less than or equal to 700 MHz	—
19.3	Enabled RX Deskew feature for multi-EMIB channels	—
19.3	Enabled Simplex TX and Simplex RX support	—
19.3	Increased FEC Direct support from greater than 12.8G data rates to greater than 10G data rates	—
19.3	Updated the supported list of TX PMA pre-emphasis values	—