

In 201.14 - Change the paragraphs on page 152 in lines 45 to 54 to read instead:

"The HS_PATH delay is defined as the time needed for a given unit of data to traverse from the input at the PHY_S XGMII to its presentation at the PHY_D XGMII, minus the link segment propagation delay.

The LS_PATH delay is defined as the time needed for a given unit of data to traverse from the input at the PHY_D XGMII to its presentation at the PHY_S XGMII, minus the link segment propagation delay.

These delays shall not exceed the limits shown in Table 201–24."

The above changes remove duplications and redundant terms (e.g. "data delay").

Add a plural "s" to PHY in line 18 of page 153.

Replace Annex 201A with the following:

Annex 201A Allocation of Delay Limit Budget (Informative)

In 201.14, the Delay Limits are set for the HS_PATH and LS_PATH, not including the delays introduced by the physical medium interconnecting the two PHYs.

In figure 201A-1, XGMII transfers are shown as X(#) where # is sequentially incrementing. Let the first 64/65 block of a RS frame or super frame contain the X(n) and X(n+1) XGMII transfers.

The TX_Delay is defined from the start of the X(n) transfer on the TX XGMII to the start of the first symbol of the frame or super frame at the MDI.

The RX_Delay is defined from the start of the first symbol of the frame or super frame at the MDI to the start of the X(n) transfer on the RX XGMII.

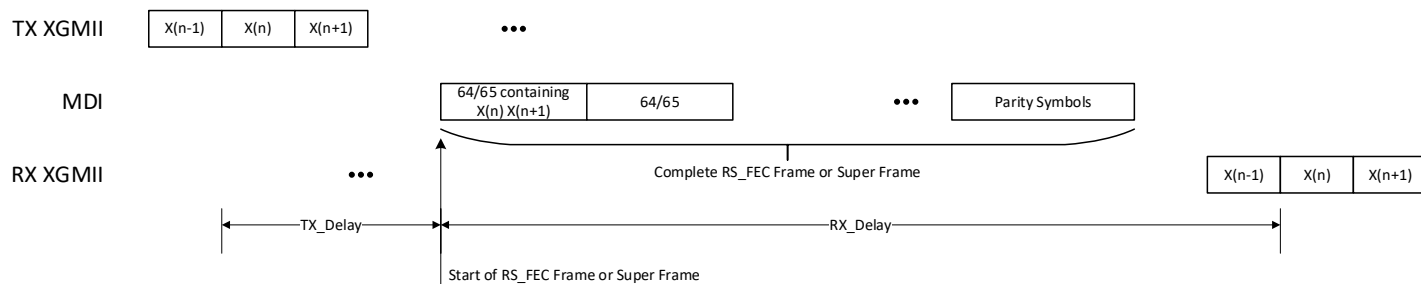
The HS_PATH delay of 201.14 is composed of the HS_TX TX_Delay in the PHY_S plus the HS_RX RX_Delay in the PHY_D.

The LS_PATH delay of 201.14 is composed of the LS_TX TX_Delay in the PHY plus the LS_RX RX_Delay in the PHY_S.

Besides the MAC Control PAUSE operation (Clause 31, Annex 31B), also the time synchronization support (Clause 90) requires this information for best interoperability between different implementations. It is therefore recommended to allocate the PATH delay portions as follows:

- The HS_TX TX_Delay is allocated 10% of the HS_PATH delay budget of Table 201-24.
- The HS_RX RX_Delay is allocated 90% of the HS_PATH delay budget of Table 201-24.
- The LS_TX TX_Delay is allocated 25% of the LS_PATH delay budget of Table 201-24.
- The LS_RX RX_Delay is allocated 75% of the LS_PATH delay budget of Table 201-24.

Figure 201A-1 XGMII to MDI to XGMII Timing Diagram



Since the start of the first symbol of the frame or super frame is not accessible easily at the MDI, it is recommended for the PHY implementers to specify TX_Delay and RX_Delay in the product's documentation and keep their variation low.