

# Transmitter Characteristics (83D.3.1)

Ryan Latchman, Mindspeed

# Transmit equalizer

Minimum de-emphasis* Post Cursor Pre Cursor	83D3.1.65	TBD TBD	dB5
---	-----------	------------	-----

Minimum transmit equalizer range:  
Change TBD to tables shown below

- **Transmitter equalizer range**
- The CAUI-4 chip-to-chip transmitter includes programmable equalization to compensate for the frequency-dependent loss of the channel and to facilitate data recovery at the receiver. The functional model for the transmit equalizer is the three tap transversal filter shown in Figure 83D-8. The transmitter output equalization is characterized using the procedure described in 72.7.1.11 where the state of the CAUI-4 transmit output is manipulated via management . The minimum pre-cursor equalization  $R_{pre}$  supported is shown in Table yyy where  $R_{pre}$  is defined in Equation (72-8).

Pre Cursor Equalizer Setting	Value
$R_{pre}$ at tap setting 0	1 +/-12.5%
$R_{pre}$ at tap setting 1	1.11 +/-12.5%
$R_{pre}$ at tap setting 2	1.25 +/-12.5%
$R_{pre}$ at tap setting 3	1.43 +/-12.5%

- The minimum post-cursor equalization  $R_{pst}$  support is shown in Table xxx where  $R_{pst}$  is defined in Equation (72-9).
- The positive and negative voltages shall match such that each of the quantities  $(v1 + v4)/v1$ ,  $(v2 + v5)/v2$ , and  $(v3 + v6)/v3$  does not exceed 0.05.

Post Cursor Equalizer Setting	Value
$R_{pst}$ at tap setting 0	1 +/-12.5%
$R_{pst}$ at tap setting 1	1.11 +/-12.5%
$R_{pst}$ at tap setting 2	1.25 +/-12.5%
$R_{pst}$ at tap setting 3	1.43 +/-12.5%
$R_{pst}$ at tap setting 4	1.67 +/-12.5%
$R_{pst}$ at tap setting 5	2 +/-12.5%