0.1 Overview

0.1.1 Scope

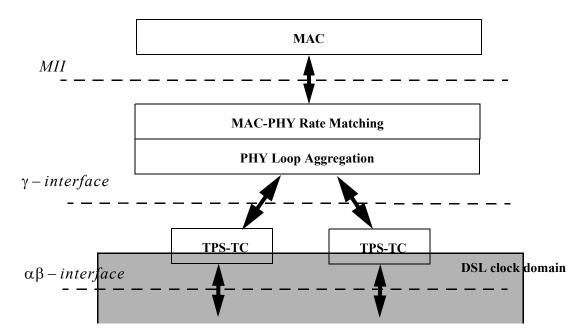
0.1.2 Objectives

0.1.3 Relation of 2BASE-TL/2PASS-TL and 10PASS-TS to other standards

0.1.4 Summary

0.1.4.1 Summary of Physical Coding Sublayer (PCS) specification

The Physical Coding Sublayers (PCS) for 2BASE-TL/2PASS-TL and 10PASS-TS contains two functions and one subsection. The relationship between the functions and subsection is shown in figure n.nn



Note that clocks used in the shaded area are derived from and synchronized to the DSL clocks which will be related to the bit rates. Data is transferred across the MII interface and the gamma interface at the speed of the MII clock. The MAC-PHY rate matching allows the inter packet gap to be adjusted so that the net data rate across these interface matches the sum of rates across the alpha/beta interfaces.

In the transmit direction a whole frame is transferred across the MII interface, through the MAC-PHY Rate Matching and PHY Loop Aggregation functions and across the gamma interface at the rate of the MII clock. The TPS-TC(s) will then signal across the gamma interface to prevent further transfer until it is ready to accept another frame. The MAC_PHY Rate Matching function prevents the transfer of another frame across the MII until the TPS-TC is ready.

In the receive direction the TPS-TC(s) signals that a frame is ready for transfer. The frame is passed across the gamma interface and passed up across the MII interface. The MAC-PHY Rate Matching function may delay the transfer of the frame across the gamma interface to avoida collision on the MII interface if required.