

### 91.3.2 PMD block diagram

The PMD sublayer is defined at the eight reference points shown in Figure 91–3 for 10GBASE–PR PMDs and in Figure 91–4 for 10/1GBASE–PRX PMDs. In Figure 91–3 and Figure 91–4, testpoints in ovals represent the downstream channel, while the testpoints in rectangles represent the upstream channel.

For 10GBASE–PR PMDs, testpoints TP1 – TP4 refer to the downstream channel, while testpoints TP5 – TP8 refer to the upstream channel. In the downstream channel, TP2 and TP3 are compliance points, while in the upstream channel TP6 and TP7 are compliance points. TP1 and TP4 and TP5 and TP8 are reference points for use by implementers. The optical transmit signal is defined at the output end of a patch cord (TP2 for the downstream channel and TP6 in the upstream channel), between 2 m and 5 m in length, of a fiber type consistent with the link type connected to the transmitter. Unless specified otherwise, all transmitter measurements and tests defined in Clause 91.8 are made at TP2 and TP6. The optical receive signal is defined at the output of the fiber optic cabling (TP3 for the downstream channel and TP7 for the upstream channel) connected to the receiver. Unless specified otherwise, all receiver measurements and tests defined in Clause 91.8 are made at TP3 and TP7.

The electrical specifications of the PMD service interface (TP1 and TP4 for the downstream channel and TP5 and TP8 for the upstream channel) are not system compliance points (these are not readily testable in a system implementation). It is expected that in many implementations, TP1, TP4, TP5 and TP8 will be common between Clause 91 PMDs.

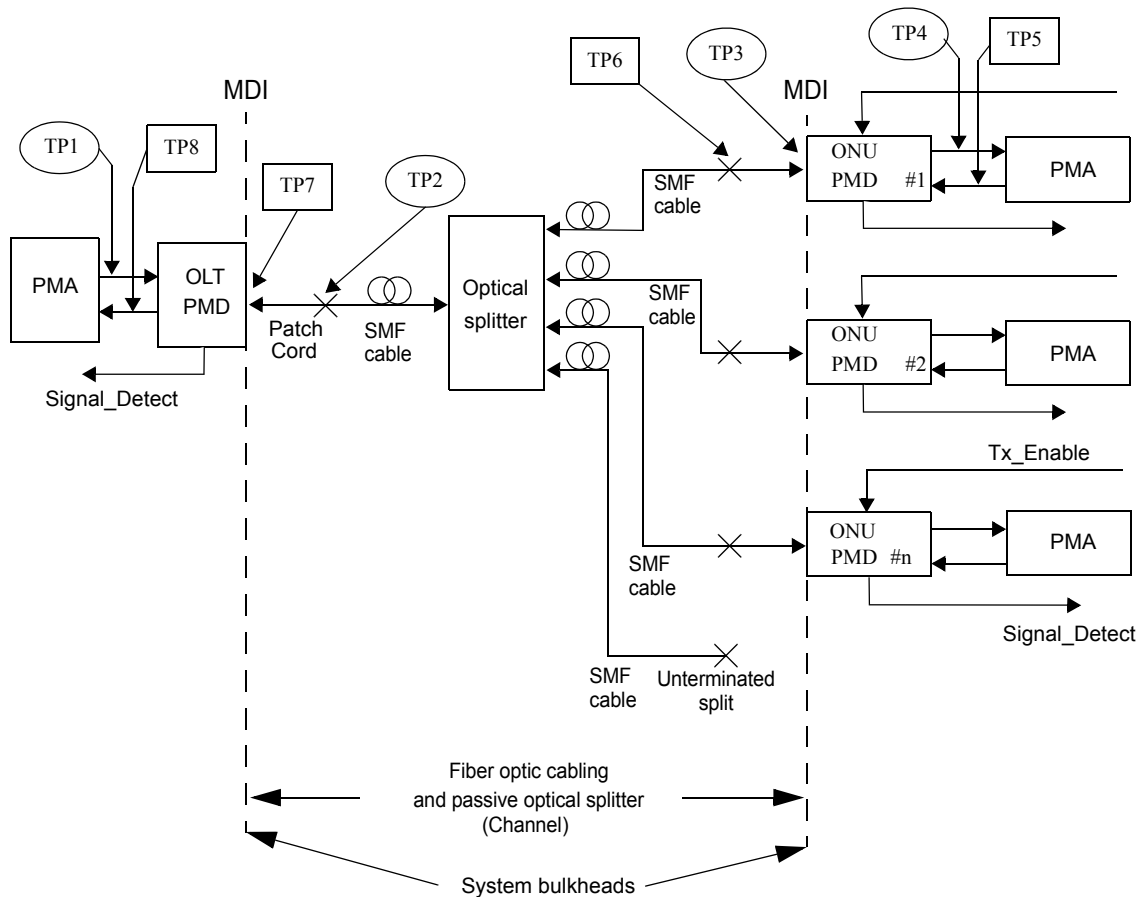


Figure 91–3—10GBASE–PR block diagram

For 10/1GBASE-PRX PMDs, testpoints TP1 – TP4 refer to the downstream channel (ovals), while testpoints TP1 – TP4 (rectangles) refer to the upstream channel. Two points, TP2 and TP3, are compliance points. TP1 and TP4 are reference points for use by implementors. The optical transmit signal is defined at the output end of a patch cord (TP2), between 2 m and 5 m in length, of a fiber type consistent with the link type connected to the transmitter. Unless specified otherwise, all transmitter measurements and tests defined in 60.7 are made at TP2. The optical receive signal is defined at the output of the fiber optic cabling (TP3) connected to the receiver. Unless specified otherwise, all receiver measurements and tests defined in @@Clause 91.8@@ are made at TP3.

The electrical specifications of the PMD service interface (TP1 and TP4) are not system compliance points (these are not readily testable in a system implementation). It is expected that in many implementations, TP1 and TP4 will be common between 10/1GBASE-PRX PMDs.

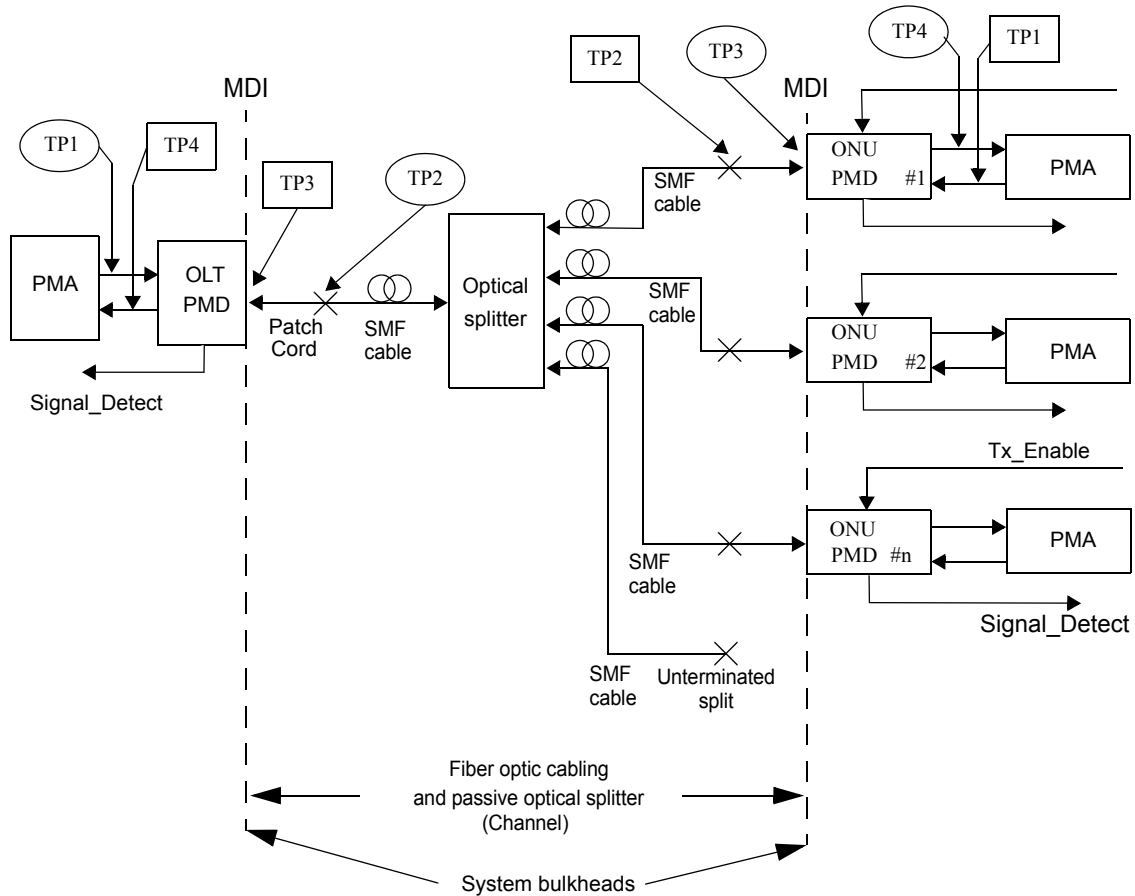


Figure 91-4—10/1GBASE-PRX block diagram