

99.4.4 Transmit processing

The Transmit Processing function receives MAC frames from eMAC and pMAC. The Transmit Processing function preempts a MAC frame from pMAC when a MM_CTL.request(HOLD) primitive is received, while enforcing the minimum size of mFrame. The preemption may only occur if at least 64 data octets of the preemptable frame have already been transmitted and at least 64 data octets of the preemptable frame remain to be transmitted. The minimum size of the mFrame may be modified based on the request from the remote PHY, as indicated in an Additional Ethernet Capabilities TLV (see 79.3.6) exchanged between link partners. The minimum size of mFrame may be set independently for each link direction.

The Transmit Processing function modifies the SFD field, as defined in 99.3.3. The Transmit Processing function modifies the CRC field, as defined in 99.3.6. If needed, the Transmit Processing function inserts the FRAG_COUNT field, as defined 99.3.4.

The Transmit Processing function shall implement the process defined in Figure 99–4.

The preemption function is defined for full duplex operation, with supported EEE or Link Interruption. Some full duplex PHYs generate PLS_CARRIER.indication to control (for example) the size of IPG. When the Transmit Processing function receives a PLS_CARRIER.indication primitive from the RS, the Transmit Processing function shall relay the same PLS_CARRIER.indication to pMAC and eMAC.