

Encapsulation for IET



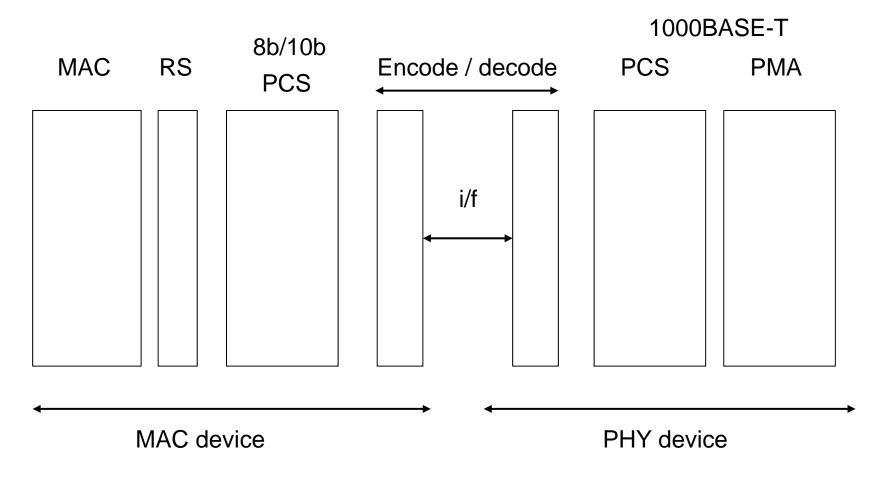
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High density MAC-PHY interfaces

- High density (4 ports or greater) 1000BASE-T PHYs
 For cost reasons, a single high speed interface is used
 Connects all the ports through 1 set of pins
- Also gets used to convey timestamping information
 For applications that don't support .3bf
- Interface not defined in 802.3
 Doesn't affect the packets on the wire
- Mechanism uses modifications to preamble
 For port identification & timestamp attachment

High density MAC-PHY interfaces

Interface inserted (effectively) within PCS



IET compatability

- MAC-PHY interface needs preamble space
 Keep preamble at full length for all frames & fragments
 Interface encode will add data into preamble...
 ... then decode will remove and replace with original
 NB only increases overhead for fragmented frames by 20%
- Preamble code space (relatively) small
 Better to minimize the number of discrete frame types
 i.e. Normal/Express & preemptable
- Interface specification must ensure MTTFPA
 Internal interfaces are responsibility of system implementer

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