



Encapsulation for IET



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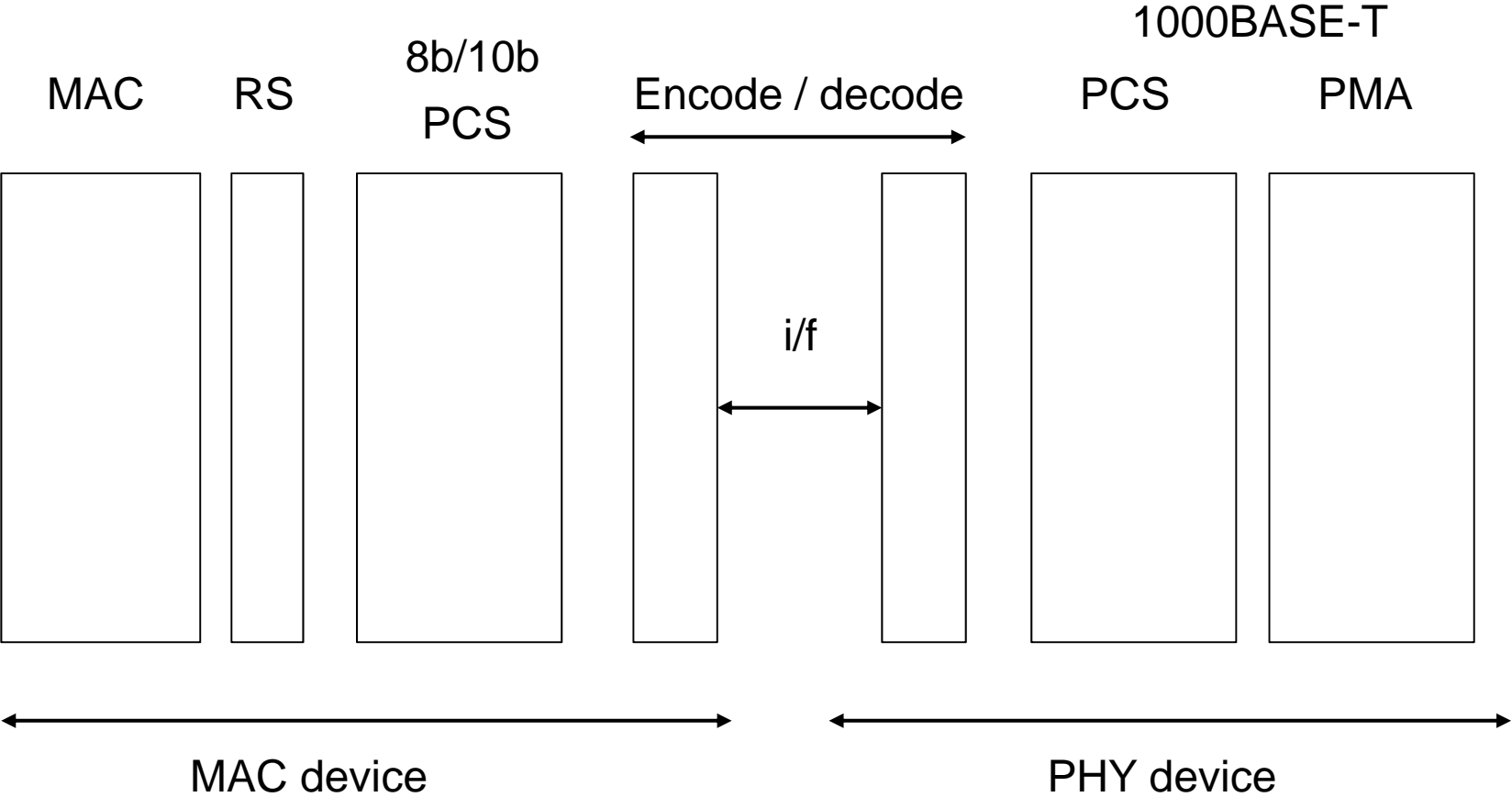
Ad Hoc Conference Call

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

Detailed changes to baseline

- Propose the following changes to baseline
thaler-01-0114-iet-proposal-v2.pdf
- Slide 12 – Mframe format
For “Intermediate Fragment” and “Last Fragment” -
Change number of octets for Preamble from 2 to 6
- Slide 16 – SMD and Count byte encodings
Change coding for SMD-E from 0x55 to 0xAB
(i.e. same as legacy frame SFD)

CISCO SYSTEMS

