

# IEEE 802.3ae: Clause 51 Update - Serial PMA

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## Clause Status:

- 1) All elements transferred in from earlier presentations.
- 2) Modes supported include both 6xxMHz and 3xxMHz mode transmit clock operations.
- 3) Key figures, diagrams and tables are incorporated.
- 4) 90% complete ... see major and minor sections for work outstanding

# Major Issues:

## 1) Transmit clocks specifications:

PMA\_TXSRC\_CLK & PMA\_TX\_CLK relationship...

- table entry for delay and jitter but need to be discussed
- OIF, Barcelona agreed to put in “Warning clause”

parameter	Description	Condition	Value
TD	Variation in delay	Frequency < 1kHz	30ns (p-p)
CJ	Jitter between clks	Frequency < 1kHz	175ps(p-p)

## Major Issues (cont'd):

- 2) Included sections 51.7 and 51.8 – Loopback and Test functions

Historical from 802.3z. Working group yet to agree on inclusion and content. Possible ties to MDIO?

## Major Issues (cont'd):

### 3) Multi-Source-Annoucement (MSA) announcement:

Infineon Technologies, JDS Uniphase, Nortel Networks and LightLogic, Inc. Announce Small Footprint OC-192 Multi-Source Agreement for Optical Transponder

How does this impacts work to date on XSBI? Will specs be made public and when. Does IEEE802.3ae need to spec pin-out, footprint?

## Minor Issues:

- 1) Nomenclature cleanup:
  - data-group(15:0) – need/how to spec differential signals for a bus
  - Specifications for “rising and falling” edges
- 2) “Required mode” – use Option A and B instead?
- 3) LVDS values – Leveraged from IEEE1596.3

# Assumptions:

- 1) REFCLK tolerance:  
    using: 6xx MHz +/- 100ppm  
    possibilities: 3xx MHz, +/-20ppm
- 2) Inclusion of sections 51.7 and 51.8  
    - Loopback and Test functions