

How and When TDP should be determined for 10GE PON??

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TDP for 10GEAPON (3av_0707_hamano_1.pdf)



		802.3av (Proposal)		802.3ae	
D/S		1.5 dB		3.0 dB (10GBASE-E)	
Wavelength		1574-1580 nm		1530-1565 nm	
Distance		20 km		40 km	
Source Type (ER)		EML (9dB)		EML (3dB)	
U/S		3.0 dB		3.2 dB (10GBASE-L)	
Wavelength		20nm in 1260-1360 nm		1260-1355 nm	
Distance		20 km		10 km	
Source Type (ER)		DFB (6dB)		DFB (3.5dB)	

- Proposal reflects current XFP product results
- U/S TDP
 - 10G DFB waveform-oriented penalty should be allocated ; resonance, dull falling edge, and baseline wandering
- D/S TDP
 - Smaller path penalty (<1dB) is assumed in contrast to 10GBASE-E
- TDP may be important for evaluating TX profiles esp. DFBs

How Should TDP Be Determined??

Does the Spread Sheet indicate TDP??

- Transmitter Penalty??

Is the assumption on current XFPs Good Guess??

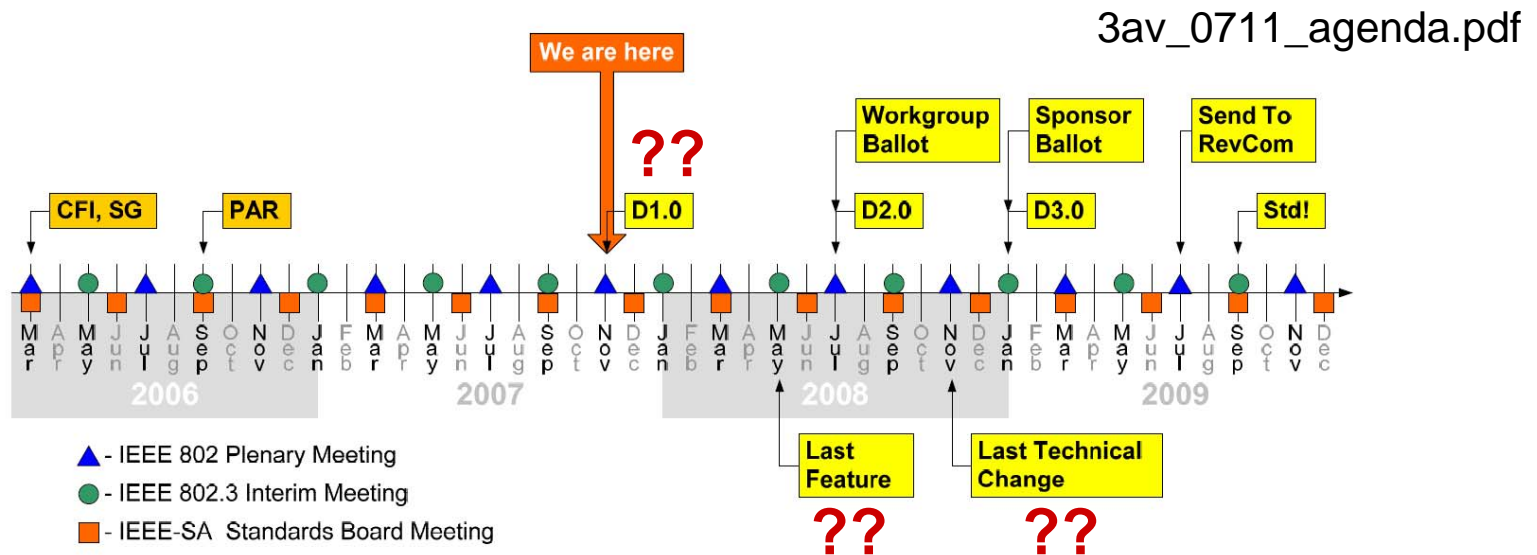
- No High-power DML production results (10G U/S)
 - Hi-DML is only for 10GE-PON, not yet in volume production
- PR30 Power Budget is not guaranteed with TX on the worst TDP

But...

- Power Budget was also assumed based on some estimations
- Development targets should be shown to optics manufacturers

When Should TDP Be Determined??

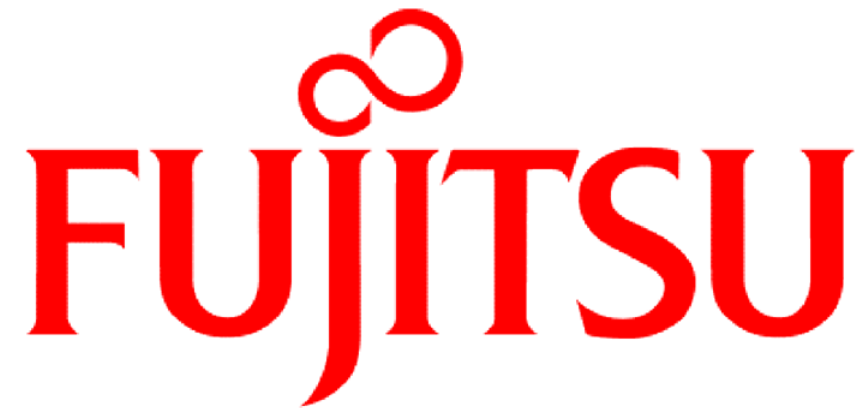
Project Timeline*



Until then, what can be expected??

- More XFP production results??
- RX sensitivity measurements with TX on the worst TDP??
- Hi-DML production results??

Comments and discussions will be appreciated !!



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THE POSSIBILITIES ARE INFINITE

Straw Poll

- TDP should be determined now for Draft 1.0 with the value presented in 3av_0707_hamano_1.pdf. _____
- TDP should be decided later with possible updated TDP value. _____
- Other opinion _____
- No opinion _____