



EPOC PHY NAME

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EPoC PHY Name



- Why it matters?
 - We're beginning to get seriously involved in the draft development and in multiple locations, PHY name will be needed to refer to the THING we are developing
 - PHY name should be descriptive and meaningful to the group as well as the world outside.
 - PHY name carries information type of encoding used in PHY, modulation format, medium type, data rate, etc. and is a mnemonic summary of PHY capabilities.
- Is this a good time to pick a name for EPoC PHY?
 - The sooner, the better – we have most needed information about EPoC PHY already (64B/66B encoded, OFDM modulation, operating on coax, at the variable rate of up to 10G)
 - Once settled, it will be used in the draft, presentations, etc., and become a de-facto calling card for EPoC

EPON PHY Naming Explained



Symmetric (1G/1G) PMD
1G-EPON

1000BASE-**PX10-D**

P for PON
X for 8b/10b coding
Power budget [**10,20**]
Location [**D** > OLT, **U** > ONU]

A diagram with four arrows pointing from the legend to the characters 'P', 'X', '10', and 'D' in the PHY name '1000BASE-PX10-D'. The arrows originate from the text 'P for PON', 'X for 8b/10b coding', 'Power budget [10,20]', and 'Location [D > OLT, U > ONU]' respectively.

Asymmetric (10G/1G) PMD
10/1G-EPON

10/1GBASE-**PRX-U1**

P for PON
R for 64b/66b coding
X for 8b/10b coding
Location [**D** > OLT, **U** > ONU]
Configuration [**1,2,3**]

A diagram with five arrows pointing from the legend to the characters 'P', 'R', 'X', 'U', and '1' in the PHY name '10/1GBASE-PRX-U1'. The arrows originate from the text 'P for PON', 'R for 64b/66b coding', 'X for 8b/10b coding', 'Location [D > OLT, U > ONU]', and 'Configuration [1,2,3]' respectively.

Symmetric (10G/10G) PMD
10/10G-EPON

10GBASE-**PR-D1**

P for PON
R for 64b/66b coding
Location [**D** > OLT, **U** > ONU]
Configuration [**1,2,3**]

A diagram with four arrows pointing from the legend to the characters 'P', 'R', 'D', and '1' in the PHY name '10GBASE-PR-D1'. The arrows originate from the text 'P for PON', 'R for 64b/66b coding', 'Location [D > OLT, U > ONU]', and 'Configuration [1,2,3]' respectively.

EPoC What ?

- Here is what we know about EPoC PHY:
 - Operates at the data rate up to 10Gb/s: 10G
 - Operates with OFDM modulation: PASS
 - 64B/66B encoded: R
 - Operates over coax: X (?)
 - Number of PMD instances: x (1-4)
- Putting it together: **10GPASS-XRx**
- X is used for coax, since C is already used for backplane media operating also over copper channels.
 - It is unfortunate, but suggest to avoid overlap with backplane PMDs
- x indicates the number of PMD instances in the given PHY (1-4) and indicates the effective data rate capability for the PHY

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NETWORKS



THANKS !