

# Past PHY naming some thoughts

David Law  
dlaw@hp.com

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2BASE-TL-O	Voice grade CO UTP PHY as specified in Clause 61 and 63
2BASE-TL-R	Voice grade subscriber UTP PHY as specified in Clause 61 and 63
10BASE5	Thick coax MAU as specified in Clause 8 (deprecated)
FOIRL	FOIRL MAU as specified in 9.9 (deprecated)
10BASE2	Thin coax MAU as specified in Clause 10
10BROAD36	Broadband DTE MAU as specified in Clause 11 (deprecated)
10BASE-T	UTP MAU as specified in Clause 14, duplex mode unknown
10PASS-TS-O	Voice grade CO UTP PHY as specified in Clause 61 and 62
10PASS-TS-R	Voice grade subscriber UTP PHY as specified in Clause 61 and 62
10BASE-FP	Passive fiber MAU as specified in Clause 16
10BASE-FB	Synchronous fiber MAU as specified in Clause 17
10BASE-FL	Asynchronous fiber MAU as specified in Clause 18
100BASE-T4	Four-pair Category 3 UTP as specified in Clause 23
100BASE-TX	Two-pair Category 5 UTP as specified in Clause 25
100BASE-BX10-D	One-fiber OLT PHY as specified in Clause 58
100BASE-BX10-U	One-fiber ONU PHY as specified in Clause 58
100BASE-FX	X fiber over PMD as specified in Clause 26
100BASE-LX10	Two-fiber PHY as specified in Clause 58
100BASE-T2	Two-pair Category 3 UTP as specified in Clause 32
1000BASE-BX10-D	One-fiber OLT PHY as specified in Clause 59
1000BASE-BX10-U	One-fiber ONU PHY as specified in Clause 59

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1000BASE-LX	X fiber over long-wavelength laser PMD as specified in Clause 38
1000BASE-LX10	Two-fiber 10 km PHY as specified in Clause 59
1000BASE-LX10	Two-fiber 10 km PHY as specified in Clause 59
1000BASE-PX10-D	One-fiber OMP OLT 10 km PHY as specified in Clause 60
1000BASE-PX10-U	One-fiber OMP ONU 10 km PHY as specified in Clause 60
1000BASE-PX20-D	One-fiber OMP OLT 20 km PHY as specified in Clause 60
1000BASE-PX20-U	One-fiber OMP ONU 20 km PHY as specified in Clause 60
1000BASE-PX30-D	One-fiber OMP OLT PHY as specified in Clause 60
1000BASE-PX30-U	One-fiber OMP ONU PHY as specified in Clause 60
1000BASE-PX40-D	One-fiber OMP OLT PHY as specified in Clause 60
1000BASE-PX40-U	One-fiber OMP ONU PHY as specified in Clause 60
1000BASE-CX	X copper over 150-Ohm balanced cable PMD as specified in Clause 39
1000BASE-KX	X PCS/PMA over an electrical backplane PMD as specified in Clause 70
1000BASE-T	Four-pair Category 5 UTP PHY as specified in Clause 40
10GBASE-LX4	X fiber over WWDWDM optics as specified in Clause 53
10GBASE-CX4	X copper over 8 pair 100-Ohm balanced cable as specified in Clause 54
10GBASE-KX4	X PCS/PMA over an electrical backplane PMD as specified in Clause 71
10GBASE-ER	R fiber over 1550 nm optics as specified in Clause 52
10GBASE-LR	R fiber over 1310 nm optics as specified in Clause 52
10GBASE-SR	R fiber over 850 nm optics as specified in Clause 52
10GBASE-LRM	R fiber over 1310 nm optics as specified in Clause 68
10GBASE-KR	R PCS/PMA over an electrical backplane PMD as specified in Clause 72
10GBASE-EW	W fiber over 1550 nm optics as specified in Clause 52
10GBASE-LW	W fiber over 1310 nm optics as specified in Clause 52
10GBASE-SW	W fiber over 850 nm optics as specified in Clause 52
10GBASE-T	Four-pair twisted-pair balanced copper cabling PHY as specified in Clause 55

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10/1GBASE-PRX-D1	One single-mode fiber 10.3125 GBd continuous downstream / 1.25 GBd burst mode upstream OLT PHY as specified in Clause 75, 10 km and a split ratio of at least 1:16
10/1GBASE-PRX-D2	One single-mode fiber 10.3125 GBd continuous downstream / 1.25 GBd burst mode upstream OLT PHY as specified in Clause 75, 10 km and the split ratio of at least 1:32
10/1GBASE-PRX-D3	One single-mode fiber 10.3125 GBd continuous downstream / 1.25 GBd burst mode upstream OLT PHY as specified in Clause 75, 20 km and a split ratio of at least 1:32
10/1GBASE-PRX-D4	One single-mode fiber 10.3125 GBd continuous downstream / 1.25 GBd burst mode upstream OLT PHY as specified in Clause 75, 20 km and a split ratio of at least 1:64
10/1GBASE-PRX-U1	One single-mode fiber 10.3125 GBd continuous downstream / 1.25 GBd burst mode upstream ONU PHY as specified in Clause 75, 10 km and a split ratio of at least 1:16
10/1GBASE-PRX-U2	One single-mode fiber 10.3125 GBd continuous downstream / 1.25 GBd burst mode upstream ONU PHY as specified in Clause 75, 10 km and the split ratio of at least 1:32
10/1GBASE-PRX-U3	One single-mode fiber 10.3125 GBd continuous downstream / 1.25 GBd burst mode upstream ONU PHY as specified in Clause 75, 20 km and a split ratio of at least 1:32
10/1GBASE-PRX-U4	One single-mode fiber 10.3125 GBd continuous downstream / 1.25 GBd burst mode upstream ONU PHY as specified in Clause 75, 20 km and a split ratio of at least 1:64
10GBASE-PR-D1	One single-mode fiber 10.3125 GBd continuous downstream / burst mode upstream OLT PHY as specified in Clause 75, 10 km and a split ratio of at least 1:16
10GBASE-PR-D2	One single-mode fiber 10.3125 GBd continuous downstream / burst mode upstream OLT PHY as specified in Clause 75, 10 km and the split ratio of at least 1:32
10GBASE-PR-D3	One single-mode fiber 10.3125 GBd continuous downstream / burst mode upstream OLT PHY as specified in Clause 75, 20 km and a split ratio of at least 1:32
10GBASE-PR-D4	One single-mode fiber 10.3125 GBd continuous downstream / burst mode upstream OLT PHY as specified in Clause 75, 20 km and a split ratio of at least 1:64
10GBASE-PR-U1	One single-mode fiber 10.3125 GBd continuous downstream / burst mode upstream ONU PHY as specified in Clause 75, 10 km and a split ratio of at least 1:16
10GBASE-PR-U3	One single-mode fiber 10.3125 GBd continuous downstream / burst mode upstream ONU PHY as specified in Clause 75, 20 km and a split ratio of at least 1:32
10GBASE-PR-U4	One single-mode fiber 10.3125 GBd continuous downstream / burst mode upstream ONU PHY as specified in Clause 75, 20 km and a split ratio of at least 1:64

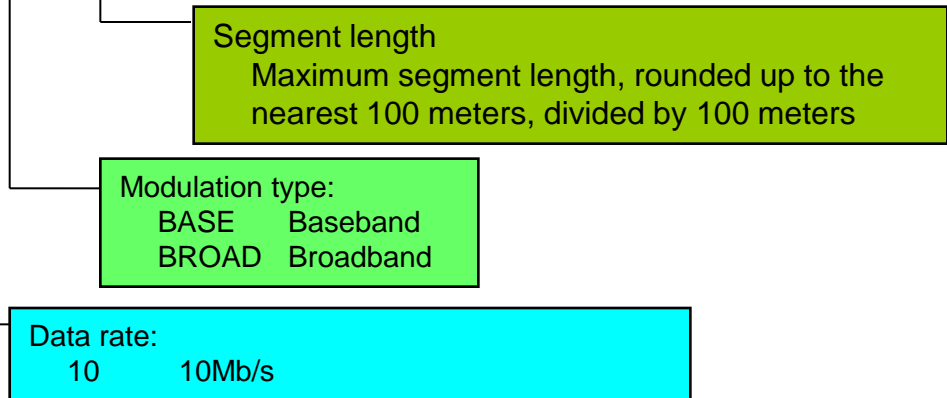
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40GBASE-KR4	40GBASE-R PCS/PMA over an electrical backplane PMD as specified in Clause 84
40GBASE-CR4	40GBASE-R PCS/PMA over 4 lane shielded copper balanced cable PMD as specified in Clause 85
40GBASE-SR4	40GBASE-R PCS/PMA over 4 lane multimode fiber PMD as specified in Clause 86
40GBASE-LR4	40GBASE-R PCS/PMA over 4 WDM lane single mode fiber PMD, with long reach, as specified in Clause 87
40GBASE-FR	40GBASE-R PCS/PMA over single mode fiber PMD as specified in Clause 89
100GBASE-CR10	100GBASE-R PCS/PMA over 10 lane shielded copper balanced cable PMD as specified in Clause 85
100GBASE-SR10	100GBASE-R PCS/PMA over 10 lane multimode fiber PMD as specified in Clause 86
100GBASE-LR4	100GBASE-R PCS/PMA over 4 WDM lane single mode fiber PMD, with long reach, as specified in Clause 88
100GBASE-ER4	100GBASE-R PCS/PMA over 4 WDM lane single mode fiber PMD, with extended reach, as specified in Clause 88

# nMTYPEADD

## nTYPEm

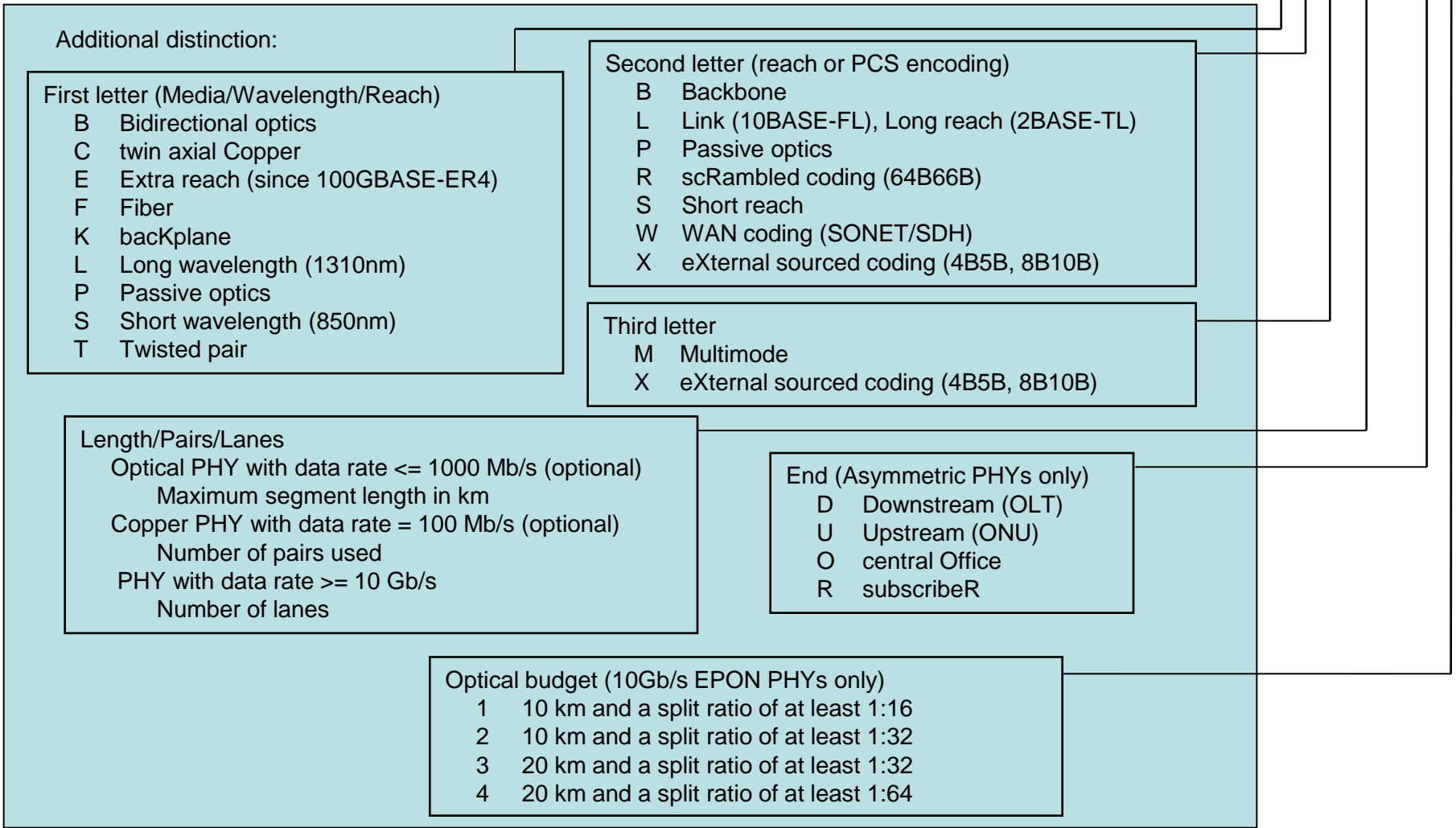


Note: Above is naming convention for 10BASE5, 10BASE2 and 10BROAD36

Data rate:	
2	2Mb/s
10	10Mb/s
100	100Mb/s
1000	1000Mb/s
10G	10Gb/s
10/1G	10Gb/s downstream, 1Gb/s upstream
40G	40Gb/s
100G	100Gb/s

## nMTYPE-LLLm-Eo

Modulation type:	
BASE	Baseband
BROAD	Broadband
PASS	Passband



Note - The PCS and PMD family names are based on use of either the first or second letter. Examples are 10GBASE-L for 10Gb/s long wavelength PMD family and 10GBASE-R for 10Gb/s scrambled encoding PCS family.

# A few comments

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- Evolved where required
  - For example we moved from just indicating media ('F' for fibre) in 100 Mb/s to wavelength ('S' and 'L' for short and long wavelength) in 1 Gb/s
- Avoided conflicting definition
  - Not had same letter in the same position meaning something different
- Provided limited description of naming in standard
  - Only directly addressed by e.g. in subclause 1.2.3 'e.g., "T" for twisted pair, "S" for short wavelength optics, "X" for a block PCS coding used for that speed of operation'