

Assignment of IANAifMauTypeListBits and IANAifMauAutoNegCapBits

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- Last [request to IANA](#) in July 2011
 - The new MAU types and the associated AutoNeg capability bits listed were specified in amendments IEEE Std 802.3ba-2010 and IEEE Std 802.3bg-2011
- Amendments approved post July 2011
 - IEEE Std 802.3bk-2013, IEEE Std 802.3bj-2014, IEEE Std 802.3bm-2015, IEEE Std 802.3bw-2015, IEEE Std 802.3by-2016, IEEE Std 802.3bq-2016, IEEE Std 802.3bp-2016 and IEEE Std 802.3br-2016

Clause 30 aMAUType enumeration and description

IEEE Std 802.3bk-2013 changes to enumeration and description

1000BASE-PX10-D	One single-mode fiber OMP OLT 10 km -PHY ₁ as specified in Clause 60, <u>supporting a distance of at least 10 km, and a split of at least 1:16</u>
1000BASE-PX10-U	One single-mode fiber OMP ONU 10 km -PHY ₁ as specified in Clause 60, <u>supporting a distance of at least 10 km, and a split of at least 1:16</u>
1000BASE-PX20-D	One single-mode fiber OMP OLT 20 km -PHY ₁ as specified in Clause 60, <u>supporting a distance of at least 20 km, and a split of at least 1:16</u>
1000BASE-PX20-U	One single-mode fiber OMP ONU 20 km -PHY ₁ as specified in Clause 60, <u>supporting a distance of at least 20 km, and a split of at least 1:16</u>

Clause 30 aMAU Type enumeration and description (con't)

IEEE Std 802.3bk-2013 new enumeration and description

1000BASE-PX30-D	One single-mode fiber OMP OLT PHY, as specified in Clause 60, supporting a distance of at least 20 km, and a split of at least 1:32
1000BASE-PX30-U	One single-mode fiber OMP ONU PHY, as specified in Clause 60, supporting a distance of at least 20 km, and a split of at least 1:32
1000BASE-PX40-D	One single-mode fiber OMP OLT PHY as specified in Clause 60, supporting a distance of at least 20 km, and a split of at least 1:64
1000BASE-PX40-U	One single-mode fiber OMP ONU PHY as specified in Clause 60, supporting a distance of at least 20 km, and a split of at least 1:64
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

Clause 30 aMAUType enumeration and description (con't)

IEEE Std 802.3bk-2013 new enumeration and description (con't)

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
10GBASE-PR-D4	One single-mode fiber 10.3125 GBd continuous downstream / burst mode upstream OLT PHY as specified in Clause 75
10GBASE-PR-U4	One single-mode fiber 10.3125 GBd continuous downstream / burst mode upstream ONU PHY as specified in Clause 75

IEEE Std 802.3bj-2014 changes to enumeration and description

100GBASE-R	100GBASE-R Multi-lane PCS as specified in Clause 82 over undefined <u>100GBASE-R or 100GBASE-P</u> PMA/PMD
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Clause 30 aMAUType enumeration and description (con't)

IEEE Std 802.3bj-2014 new enumeration and description

100GBASE-CR4	100GBASE-R PCS/PMA over 4 lane shielded copper balanced cable PMD as specified in IEEE Std 802.3 Clause 92
100GBASE-KR4	100GBASE-R PCS/PMA over an electrical backplane PMD as specified in IEEE Std 802.3 Clause 93
100GBASE-KP4	100GBASE-P PCS/PMA over an electrical backplane PMD as specified in IEEE Std 802.3 Clause 94

IEEE Std 802.3bm-2015 new enumeration and description

40GBASE-ER4	40GBASE-R PCS/PMA over 4 WDM lane single mode fiber PMD, with extended reach, as specified in IEEE Std 802.3 Clause 87
100GBASE-SR4	100GBASE-R PCS/PMA over 4 lane multimode fiber PMD as specified in IEEE Std 802.3 Clause 95

Clause 30 aMAUType enumeration and description with (con't)

IEEE Std 802.3by-2016 new enumeration and description

25GBASE-R	PCS as specified in Clause 107 with PMA as specified in Clause 109 over undefined PMD
25GBASE-CR	25GBASE-R PCS/PMA over shielded balanced copper cable PMD as specified in Clause 110
25GBASE-CR-S	25GBASE-R PCS/PMA over shielded balanced copper cable PMD as specified in Clause 110 without support for RS-FEC
25GBASE-KR	25GBASE-R PCS/PMA over an electrical backplane PMD as specified in Clause 111
25GBASE-KR-S	25GBASE-R PCS/PMA over an electrical backplane PMD as specified in Clause 111 without support for RS-FEC
25GBASE-SR	25GBASE-R PCS/PMA over multimode fiber PMD as specified in Clause 112

Clause 30 aMAUType enumeration and description with (con't)

IEEE Std 802.3bw-2015 new enumeration and description

100BASE-T1	Single balanced twisted-pair copper cabling PHY as specified in IEEE Std 802.3 Clause 96
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IEEE Std 802.3bq-2016 new enumeration and description

25GBASE-T	Four-pair twisted-pair balanced copper cabling PHY as specified in IEEE Std 802.3 Clause 113
40GBASE-T	Four-pair twisted-pair balanced copper cabling PHY as specified in IEEE Std 802.3 Clause 113

IEEE Std 802.3bp-2016 new enumeration and description

1000BASE-T1	Single twisted-pair copper cable PHY as specified in IEEE Std 802.3 Clause 97
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Clause 30 aAutoNegLocalTechnologyAbility enumeration and description

IEEE Std 802.3bj-2014 new enumeration and description

100GBASE-CR4	100GBASE-CR4 as specified in Clause 92
100GBASE-KR4	100GBASE-KR4 as specified in Clause 93
100GBASE-KP4	100GBASE-KP4 as specified in Clause 94

IEEE Std 802.3by-2016 new enumeration and description

25GR-S	25GBASE-CR-S as specified in Clause 110 or 25GBASE-KR-S as specified in Clause 111
25GR	25GBASE-CR as specified in Clause 110 or 25GBASE-KR as specified in Clause 111
RS-FEC25G Req	25G RS-FEC requested as specified in Clause 73 (see 73.6.5) and Clause 108
BASE-RFEC25G Req	25G BASE-R FEC requested as specified in Clause 73 (see 73.6.5) and Clause 74

Clause 30 aAutoNegLocalTechnologyAbility enumeration and description

IEEE Std 802.3bq-2016 new enumeration and description

25GBASE-T	25GBASE-T as specified in Clause 113
40GBASE-T	40GBASE-T as specified in Clause 113

IEEE Std 802.3bp-2016 new enumeration and description

1000BASE-T1	1000BASE-T1 as specified in Clause 97
Rem Fault	Remote fault bit (RF) as specified in Clause 73 <u>and Clause 98</u>
Force MS	Force MASTER-SLAVE as specified in Clause 98 (see 98.2.1.2.5)