|  |  |
| --- | --- |
| Term | Definition |
| bridge | see IEEE P802.3bh, D3.2, 1.4.113  *A layer 2 interconnection device that does not form part of a CSMA/CD collision domain but conforms to IEEE Std 802.1D. A bridge does not form part of a CSMA/CD collision domain but, rather appears as a Media Access Control (MAC) to the collision domain. (See also IEEE 100.)* |
| burst | ??? define irrespective of the transmission direction to accommodate downstream and upstream ? |
| burst detector / data detector | Data detector is defined in EPON right now – do we just point to it? |
| CDN | Coax Distribution Network  Passive or amplified coaxial distribution network, spanning between the MDI on CNU and the MDI on the CLT, carrying RF signals in downstream and upstream (FDD mode) or downstream or upstream (TDD mode) direction |
| CLT | Coax Line Terminal  The network-end DTE for a coaxial access network. The CLT is the master entity in a P2MP network with regard to the MPCP protocol. |
| CNU | Coax Network Unit  The subscriber-end DTE to a coaxial access network. A CNU is a slave entity in a P2MP network with regard to the MPCP protocol. |
| code word | ??? – does it apply to line coding operation ??? |
| cycle time | ??? |
| cyclic prefix overhead | ??? |
| downstream | see IEEE P802.3bh, D3.2, 1.4.173  *In an access network, where there is a clear indication in each deployment as to which end of a link is closer to a subscriber, transmission toward the subscriber end of the link.* |
| EPoC | EPON Protocol over Coax |
| EPoC service group | All CNUs connected to a CLT |
| FDD | Frequency Division Duplexing  An operating mode of EPoC, in which the transmitter and receiver operate at different frequency bands, transmitting and receiving simultaneously across the CDN |
| FEC block |  |
| fragmentation | ??? – need more discussion on whether the term needs to be defined in a generic way or not |
| frame | see IEEE P802.3bh, D3.2, 1.4.248  *Consists of the Destination Address, Source Address, Length/Type field, MAC Client Data, Pad (if required), and Frame Check Sequence.* |
| gap time / period | ??? |
| guard time / period | ??? |
| HFC | Hybrid Fiber Coax network  A network, in which fiber is used to transmit analog RF signals |
| high split | an HFC network requiring a diplex filter in which the upstream is transported in spectrum below the downstream, and where the split between the upstream and downstream occurs below 216 MHz |
| Idle Deletion | Point to specification in 10G-EPON? |
| Idle Insertion | Point to specification in 10G-EPON? |
| Interleaver / block interleaver | TBD |
| LLID | Logical Link Identifier  see IEEE P802.3bh, D3.2, 1.4.246  *A numeric identifier assigned to a P2MP association between an OLT and ONU established through the Point-to-Point Emulation sublayer. Each P2MP association is assigned a unique LLID. The P2MP association is bound to an ONU DTE, where a MAC would observe a private association.* |
| low split | also known as sub-split, an HFC network requiring a diplex filter in which the upstream is transported in spectrum below the downstream, and where the split between the upstream and downstream occurs below 42 MHz in 6 MHz channel plan systems and 65 MHz in 8 MHz channel plan systems |
| middle split | also known as extended sub-split, an HFC network requiring a diplex filter in which the upstream is transported in spectrum below the downstream, and where the split between the upstream and downstream occurs below 108 MHz |
| OCU  FCU  FCN  OCN | Optical Coax Unit  Fiber Coax Unit  Fiber Coax Node  Optical Coax Node  A network element, internetworking between EPON and EPoC. Details are TBD |
| OFDMA |  |
| OLT | see IEEE P802.3bh, D3.2, 1.4.289  *The network-end DTE for an optical access network. The OLT is the master entity in a P2MP network with regard to the MPCP protocol.* |
| ONU | see IEEE P802.3bh, D3.2, 1.4.291  *The subscriber-end DTE to an optical access network. An ONU is a slave entity in a P2MP network with regard to the MPCP protocol.* |
| packet | see IEEE P802.3bh, D3.2, 1.4.299  *Consists of a MAC frame as defined previously, preceded by the Preamble and the Start Frame Delimiter, encoded, as appropriate, for the Physical Layer (PHY) type.* |
| PCS | Physical Coding Sublayer  see IEEE P802.3bh, D3.2, 1.4.313  *Within IEEE 802.3, a sublayer used in certain port types to couple the Media Independent Interface (MII), Gigabit Media Independent Interface (GMII) or 10 Gigabit Media Independent Interface (XGMII) and the Physical Medium Attachment (PMA). The PCS contains the functions to encode data bits for transmission via the PMA and to decode the received conditioned signal from the PMA. There are several PCS structures. (For example, See IEEE Std 802.3, Clause 23, Clause 24, Clause 32, Clause 36, Clause 40, Clause 48, Clause 49, and Clause 82.)* |
| PHY | Physical Layer entity  see IEEE P802.3bh, D3.2, 1.4.314  *Within IEEE 802.3, the portion of the Physical Layer between the Medium Dependent Interface (MDI) and the Media Independent Interface (MII), Gigabit Media Independent Interface (GMII) or 10 Gigabit Media Independent Interface (XGMII),consisting of the Physical Coding Sublayer (PCS), the Physical Medium Attachment (PMA), and, if present, the WAN Interface Sublayer (WIS) and Physical Medium Dependent (PMD) sublayers. The PHY contains the functions that transmit, receive, and manage the encoded signals that are impressed on and recovered from the physical medium. (For example, See IEEE Std 802.3, Clauses 23to 26, Clause 32, Clause 36, Clause 40, Clauses 48to 54, Clauses 58to 63, Clause 65, Clause 66, and Clauses 82to 89.)* |
| PMA | Physical Medium Attachment sublayer  see IEEE P802.3bh, D3.2, 1.4.315  *Within 802.3, that portion of the Physical Layer that contains the functions for transmission, reception, and (depending on the PHY) collision detection, clock recovery and skew alignment. (For example, See IEEE Std 802.3, Clauses 7, 12, 14, 16, 17, 18, 23, 24, 32, 36, 40, 51, 62, 63, 66, and 83.)* |
| PMD | Physical Medium Dependent sublayer  see IEEE P802.3bh, D3.2, 1.4.316  *Within 802.3, that portion of the Physical Layer responsible for interfacing to the transmission medium. The PMD is located just above the Medium Dependent Interface (MDI). (For example, See IEEE Std 802.3, Clause 25, Clause 26, Clause 38, Clause 39, Clause 54, Clauses 58to 60, Clause 62, Clause 63, and Clauses 84to 89.)* |
| QAM | ??? |
| ranging | see IEEE P802.3bh, D3.2, 1.4.339 (needs to be adapted to fit EPoC)  *A procedure by which the propagation delay between a master (e.g., OLT) and slave (e.g., ONU) is measured. The round trip delay computation is performed by the OLT, using the timestamp in MPCP messages from the ONU.* |
| repeater | see IEEE P802.3bh, D3.2, 1.4.346  *Within IEEE 802.3, a device as specified in Clause 9and Clause 27that is used to extend the length, topology, or interconnectivity of the physical medium beyond that imposed by a single segment, up to the maximum allowable end-to-end transmission line length. Repeaters perform the basic actions of restoring signal amplitude, waveform, and timing applied to the normal data and collision signals. For wired star topologies, repeaters provide a data distribution function. In 100BASE-T, a device that allows the inter-connection of 100BASE-T Physical Layer (PHY) network segments using similar or dissimilar PHY implementations (e.g., 100BASE-X to 100BASE-X, 100BASE-X to 100BASE-T4). Repeaters are only for use in half duplex mode networks. (See IEEE Std 802.3, Clause 9and Clause 27.)* |
| RTT | Round Trip Time  In EPON and EPoC, RTT is the difference between the local MPCP timer value and the value in the timestamp field carried in the time-stamped MAC Control message (see Table 31A–1), used for the ranging process. |
| switching / turnaround time | In TDD, between downstream and upstream transmission direction |
| symbol | ??? |
| TDD | Time Division Duplexing  An operating mode of EPoC, in which the transmitter and receiver operate at the same frequency band, where transmitting and receiving operations across the CDN are interleaved in time. |
| top split | an HFC network requiring a triplex filter in which there are two upstream bands, one transported in spectrum below the downstream occupying spectrum as per either the low, mid or high splits defined above, and another transported in spectrum above the downstream |
| upstream | see IEEE P802.3bh, D3.2, 1.4.411  *In an access network, transmission away from the subscriber end of the link. Applicable to networks where there is a clear indication in each deployment as to which end of a link is closer to a subscriber.* |
| XGMII | 10 Gigabit Media Independent Interface  see IEEE P802.3bh, D3.2, 1.4.69  *The interface between the Reconciliation Sub-layer (RS) and the Physical Coding Sublayer (PCS) for 10 Gb/s operation. (See IEEE Std 802.3, Clause 46.)* |