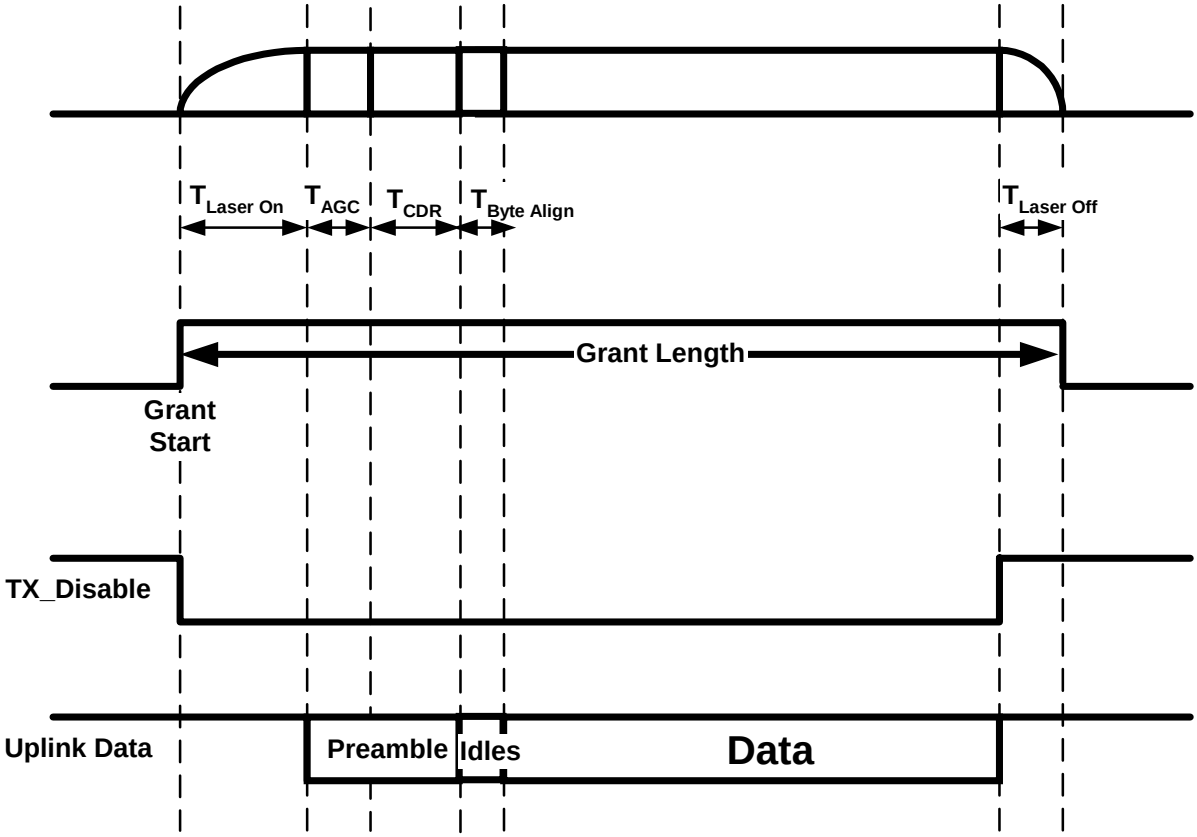
58.8.14 Laser On/Off timing measurement

58.8.14.1 Definitions



Denote T_{laser_on} as the time from the falling edge of the TX_disable line to the time that the optical power reaches (90%?) of its Average launch power (And opening of the eye diagram to its specified parameters), as presented in the figure above. The data transmitted maybe any valid 8B/10B symbols.

Standard defines maximal values.

Denote T_{laser_off} as the time from the rising edge of the TX_disable line to the time that the optical power reaches (10%?) above its Average launch power of off transmitter, as presented in the figure above.

Standard defines maximal values.

58.8.14 AGC lock and CDR lock timing measurement

58.8.14.1 Definitions

Denote T_{AGC_lock} as the time from the time that the optical power in the receiver reaches (90%?) of its Average launch power to the time that the electrical signal after the PMD reaches (90%?) of its Average steady state power (And opening of the eye diagram at the receiver to its specified parameters), as presented in the figure above. The data transmitted maybe any valid 8B/10B symbols (or a specific preamble). Also optical power at the beginning of the locking may be at any Rx power or frequency shift matching the standard specifications.

Standard defines maximal values.

Denote T_{CDR_lock} as the time from the time that the electrical signal after the PMD reaches (90%?) of its Average steady state power (And opening of the eye diagram at the receiver to its specified parameters) to the time the CDR acquires the phase and frequency of the electrical signal (Phase reaching up to xxx° difference degrading up to 1dB according to the eye diagram in figure 38-2), as presented in the figure above. The data transmitted maybe any valid 8B/10B symbols (or a specific preamble).

Standard defines maximal values.