Getting into Sync or loosing Sync

TimeReceiver

Getting into Sync

A PTP Instance enters the sync state, if the deviation between the local estimated Grandmaster time and the received, filtered Grandmaster time is three consecutive times below a defined threshold.

Loosing Sync

A PTP Instance leaves the sync state, if the deviation between the local estimated Grandmaster time and the received, filtered Grandmaster time is three consecutive times above a defined threshold.

Sync is additionally lost, if the connection to the Grandmaster is lost, for example indicated by missing three consecutive sync frames. This also applies if the path delay is no longer measurable, for example by missing three consecutive Pdelay measurement frames.

ClockTarget

Getting into Sync

A ClockTarget enters the sync state, if the assigned TimeReceiver is in sync state and the application couples this ClockTarget to the TimeReceiver.

Loosing Sync

A ClockTarget loses the sync state, if the assigned TimeReceiver loses its sync state. The application immediately decouples the ClockTarget from the assigned TimeReceiver.