

TCC-PTP - IEEE 1588v2 Card

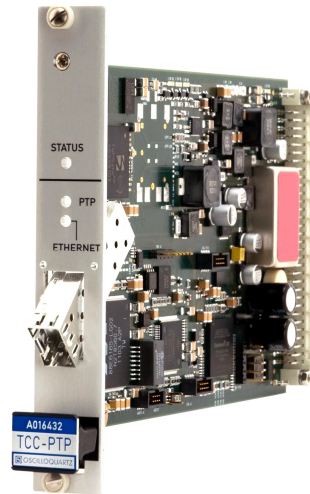
Plug-in IEEE 1588v2 PTP Grandmaster for OSA 5548C SSU/TSG

TELECOM NETWORKS

PROFESSIONAL COMMUNICATION

POWER & UTILITIES

DIGITAL BROADCASTING



Highlights

- IEEE 1588-2008 (v2) Grandmaster
- Powerful PTP engine
- Gigabit Ethernet Electrical and Optical (SFP) ports
- Single or Dual GPS input source
- Frequency, Phase and/or Time-of-day auxiliary inputs and outputs
- ± 100 ns timing accuracy when locked to GPS
- Highly stable internal dual or single Quartz and/or Rubidium oscillator(s)
- Plug and play card

Applications

- 2G, 3G, LTE, CDMA2000
- WiMAX
- DAB, DVB and DTV
- Ethernet Backhaul
- Passive Optical Networks (PON)
- Circuit Emulation Services
- Electrical Power Utilities

The Precision Time Protocol (PTP) is a solution for the distribution of synchronization over packet networks such as IP, IP/MPLS, Ethernet, IP/xPON and IP/xDSL networks.

Oscilloquartz offers a comprehensive range of PTP products covering all synchronization needs in the telecommunication, broadcast and power and utilities domains.

The TCC-PTP is a card-level IEEE 1588v2 Grandmaster designed for being integrated into Oscilloquartz modular products such as the OSA 5548C SSU/TSG. The TCC-PTP receives frequency, phase and time-of-day from the host product's internal bus.

In a typical case the OSA 5548C is equipped with one or two GNSS-receiver cards which deliver frequency, phase and time-of-day to the internal bus and thus to the TCC-PTP.

The TCC-PTP fits into any of the output slots of the host product. This makes the solution scalable.

In an OSA 5548C SSU-E60 there are 6 output slots which can receive a TCC-PTP. In the larger OSA 5548C SSU E200 / TSG there is space for 20 TCC-PTP cards.

Often these output slots are used to provide diverse output signal types such as 2.048 MHz, 2.048 Mbit/s, 1.544 Mbit/s, 64 kHz C/C, NTP, PTP, etc. The modular structure allows customers to combine output card types to best fit their needs.

The TCC-PTP is managed locally or remotely through the host product's management interface and SyncView *Plus*.

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PTP Master port

Protocol:	IEEE 1588-2008 (Version 2)
Electr./Optical port:	1x SFP Ethernet 1 Gbit/s
PTP profile:	User configurable
IP Configuration:	DHCP or Fixed IP
VLAN:	1 per port
Communication:	Unicast, Multicast or Mixed
TWTT method:	1-step or 2-step mode
Compliance:	3rd-party PTP Slave
PTP Time accuracy:	±100 ns when locked to GPS ITU-T G.8272
Card location:	Output slots
Number of cards and ports:	1 to 6 in OSA 5548C SSU-E60 1 to 20 in OSA 5548C SSU-E200

Time Reference

Time code is always available with the accuracy provided by the selected synchronization source amongst:

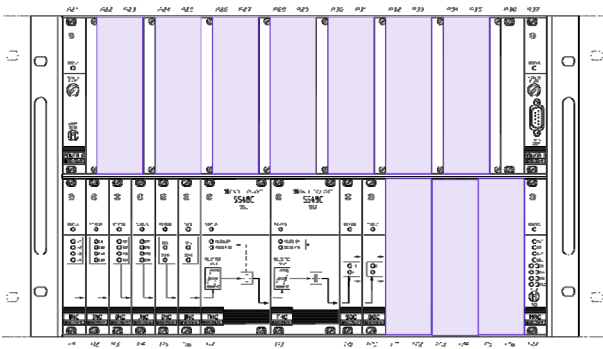
- Integrated GPS card
- Synchronization inputs
 - up to 4 in OSA 5548C SSU-E60
 - up to 8 in OSA 5548C SSU-E200
- Internal sync references oscillator when OSA 5548C is running in holdover (Rubidium or OCXO)

Communication

Integrated into OSA 5548C management system and physically separated from the PTP port:

- Management Software: SyncView PLUS or CLI
- Language: TL1
- Protocol: Raw data or Telnet
- Communication port:
 - Local: 2x RS-232
 - Remote: Ethernet RJ-45 10/100 Base-T

Below in violet are the slots where TCC-PTP cards can be inserted in OSA 5548C SSU-E200.



Subject to change without prior notice.