Oscilloquartz SyncSeminar

Interlaken, Switzerland, 10th to 12th May

Speakers:

Hasnat Babar, Network Consultant
Alain Michaud, Director R&D and PLM Time & Frequency
Dominik Schneuwly, Senior Network Consultant

Preliminary Agenda - Tuesday, 10th May 2016
Seminar: Synchronization Technologies

13:00-13:30	***Registration***
13:30-13:45	**Opening Address** (Jean Dubuis, Dominik Schneuwly)
13:45-14:40	**The Need for Synchronization** (Hasnat Babar) • Synchronization needs in packet switched networks
14:40-15:10	**Synchronization Sources** (Alain Michaud) • Primary reference frequency sources based on atomic Cesium clocks
15:10-15:30	***Coffee & tea break***
15:30-16:00	**Synchronization Sources cont'd** (Alain Michaud) • Rubidium and quartz oscillators • Primary reference phase & time sources based on GNSS
16:00-17:20	**Synchronization Distribution: General Principles** (Dominik Schneuwly) • Physical layer synchronization transfer • Packet-based synchronization transfer • Synchronization impairment
17:20-17:30	**Reviews, discussions, questions and answers**
17:30	***Close***
18:00	***Ice Breaker Event***

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ISO 9001
ISO 14001

Preliminary Agenda - Wednesday, 11th May 2016
Seminar: Synchronization Technologies (continued)

08:15-08:30	***Registration***
08:30-10:10	**Synchronization Performance Metrics** (Dominik Schneuwly) • Metrics for frequency transfer over the physical layer • Metrics for packet-based frequency transfer • Metrics for packet-based phase & time transfer
10:10-10:30	***Coffee & tea break***
10:30-12:00	**Solution 1: Synchronous Ethernet** (Dominik Schneuwly) • Working principle • Clocks and their specifications • Architecture and network engineering • Relevant standards
12:00-13:30	***Lunch***
13:30-15:00	**Solution 2: PTP (IEEE 1588) without Timing Support** (Dominik Schneuwly) • Working principle • Clocks and their specifications • Architecture and network engineering • Relevant standards
15:00-15:20	***Coffee & tea break***
15:20-16:30	**Solution 3: PTP (IEEE 1588) with Full Timing Support** (Hasnat Babar) • General introduction to phase synchronization with PTP • Working principle • Clocks and their specifications
16:30-16:40	**Reviews, discussions, questions and answers**
16:40	***Close***
17:00	***Social Event***

Preliminary Agenda - Thursday, 12th May 2016
Seminar: Synchronization Technologies (continued)

08:15-08:30	***Registration***
08:30-09:15	**Solution 3: PTP (IEEE 1588) with Full Timing Support cont'd** (Hasnat Babar) • Architecture and network engineering • Relevant standards
09:15-10:10	**Solution 4: PTP (IEEE 1588) with Partial Timing Support** (Hasnat Babar) • Working principle • Clocks and their specifications • Architecture and network engineering • Relevant standards
10:10-10:30	***Coffee & tea break***
10:30-11:00	**Performance of APTS** (Dominik Schneuwly) • Measurement results & consequences for the architecture
11:00-12:00	**Synchronization Assurance** (Dominik Schneuwly) • Monitoring and probing
12:00-13:30	***Lunch***

Workshop: Applications and Demonstrations

13:30-15:00	**Product Presentations** (Gregory Binggeli) • Oscilloquartz product overview • Detailed product presentations: OSA 5335, OSA 5410/11, OSA 5420/21 & OSA 5401
15:00-15:15	***Coffee & tea break***
15:15-16:15	**Live Demos with:** • OSA 5335, OSA 5410/11, OSA 5420/21 & OSA 5401 in Grandmaster, APTS and probe configurations
16:15-16:30	***Farewell Address & Close*** *(Jean Dubuis)*