National Institute of Standards and Technology
U.S. Department of Commerce

Engineering Laboratory (https://www.nist.gov/el)

Intelligent Systems Division (https://www.nist.gov/el/intelligent-systems-division-73500)

IEEE 1588 Products & Implementations

IEEE 1588
(https://www.nist.gov/intelligent-systems-division/ieee-1588)

- Introduction (https://www.nist.gov/intelligent-systems-division/introduction-ieee-1588)
- P1588 Working Group (https://www.nist.gov/intelligent-systems-division/p1588-working-group-revise-ieee-1588-2002)
- Products and Implementations (https://www.nist.gov/intelligent-systems-division/ieee-1588-products-implementations)
- Obtain a copy (https://www.nist.gov/intelligent-systems-division/ordering-ieee-1588-standard-precision-clock-synchronization-protocol)
- Conferences, Plugfests, and Workshops (https://www.nist.gov/intelligent-systems-division/1588-conferences)
- Related websites (https://www.nist.gov/intelligent-systems-division/related-web-sites-1588)

For further information, contact

Kang Lee
(https://www.nist.govmailto:kang.lee@nist.gov)
301 975 6604 Telephone
301 990 3851 Facsimile

100 Bureau Drive,
M/S 8223

IEEE 1588 Products & Implementations

This page provides pointers to web sites describing IEEE-1588 (PTP) products or in implementing the standard. Implementers of IEEE 1588 are encouraged to sup material for inclusion on this page. Please provide a pointer to a web site along wi description of the site contents. Please send this material to Kang Lee (https://www.nist.govmailto:kang.lee@nist.gov).

The following are pointers to web sites for commercial products described as impl 1588. **NIST does not necessarily endorse the views expressed or the fac this site. Further, NIST does not endorse any commercial products tha advertised or available on this site.** The sites are listed in alphabetical order institution.

ARG Electrodesign Limited (http://arg.co.uk/network-products/arg-quarra-ptp 1Gbs and 10Gbs Carrier Class IEEE1588v2 switches with optional GPS and SyncE

Bartky Networks (http://www.bartky.net/products): Software protocol stack an IEEE 1588 and IEEE 802.1AS. Specializing in PTP on Freescale MPC8313E chip a Audio/Video Bridging usage.

Bustec (http://www.bustec.com/products/detail/prodaq6100/): A complete lin acquisition and test products supporting IEEE-1588 with the ProDAQ 6100 LXI c

Calnex Solutions: providing comprehensive IEEE 1588v2 testing and emulation s from 100Mb/s to 100Gb/s. The Calnex Paragon-X (http://www.calnexsol.com/p x.html) supports both the IEEE1588v2 "end-to-end" profile as well as "peer-to-pe transportable Calnex Sentinel (http://www.calnexsol.com/products/sentinel-pr description.html) is used for IEEE 1588v2 field maintenance and troubleshooting

Conemtech (http://www.conemtech.com/Products/Module_Components/M50 Network Sync Module M50-34 - Multi Time Source Time and Frequency Controll

Domain Time (http://www.greyware.com/) Complete IEEE 1588 software impl monitoring for Windows, scalable for the Enterprise.

EndRun Technologies -- provides high performance IEEE 1588 PTP Grandmaster Sonoma Network Time Server (http://endruntechnologies.com/ptp-ieee-1588-g and Meridian II Precision TimeBase (http://endruntechnologies.com/gps-frequ product lines referenced to GPS or CDMA.

FEI-Zyfer, (http://www.fei-zyfer.com/) Inc. offers two IEEE 1588-2008 PTP v2 lines, the PTPSync III GPS referenced (SAASM or C/A) 1588 system and an IEEE for the CommSync II family of systems.

Hilscher
(http://www.hilscher.com/fileadmin/cms_upload/de/Resources/pdf/netX_10_I 11_EN.pdf): The network controller netX containing an IEEE 1588 hardware supp

Gaithersburg, MD
20899-8223

Intel (http://download.intel.com/design/intarch/ep80579/320428.pdf): Proces
Intel-Architecture-based System on Chip , IXP465 microprocessor , Ethernet Con
82576, 82580 10G: 82599

Ixia Anue 3500: Real-world testing solutions for validating IEEE 1588 / PTPv2

IXXAT (http://www.ixxat.de/introduction_ieee_1588_en,18391,5873.html): A
stack implementing IEEE 1588.

Korusys (http://www.korusys.com/products.php) Ltd: Ltd has released a PTP P
implements telecoms grade clock recovery as a PCI plug-in card or stand-alone OI

Masterclock, Inc. (http://www.masterclock.com/) : The GMR1000 IEEE 1588 P
Clock/NTP Server (http://www.masterclock.com/products/master-clocks/gmr1
GMR5000 IEEE 1588 PTP Grandmaster Clock/NTP Server
(http://www.masterclock.com/products/master-clocks/gmr5000/) with optional
receiver can also provide NMEA 0183, IRIG-B, PPO, and 10 MHz outputs.

Meinberg: Combined IEEE1588 Grandmaster Clock/NTP Time Server with GPS
(http://www.meinberg.de/english/products/ptp-time-server-gps.htm), Combine
Ordinary Clock/NTP Time Server (http://www.meinberg.de/english/products/
server.htm), Product starter kit (http://ptp-starterkit.meinberg.de/), and PTP cl
(http://www.meinberg.de/english/products/syncbox_ptp.htm)

Microsemi (http://www.symmetricom.com/products/time-frequency-distributi
instruments/xli-ieee-1588-grandmaster/): **IEEE 1588 Grandmaster Clock su
version 2 and delivers nanosecond time and frequency synchronizatio
Ethernet Networks. Microsemi acquired Symmetricom.**

Moxa (http://www.moxa.com/Event/Sys/2011/IEEE_1588/index.htm): Full lir
(software and Hardware) enabled industrial managed Ethernet switches (Bounda
Transparent Clock).

Napatech Onboard IEEE 1588-2008 Support (http://www.napatech.com/featu
precision/onboard-ieee-1588-2008-ptp-v2-support): Napatech's NT20E2-PTP ha
1588-2008 v2 Precision Time Protocol (PTP) support that can be used for applica
nanosecond time stamping and time synchronization.

National Instruments: A PCI NIC card with IEEE 1588
(http://sine.ni.com/nips/cds/view/p/lang/en/nid/202345) , A PXI card supporti
(http://sine.ni.com/nips/cds/view/p/lang/en/nid/211064), and IRIG

OnTime Network (http://ontimenet.com/products-network-clocks/): The OnTi
2008 (PTP) protocol stack for Grand Master-, Transparent-, Ordinary- and Slave
operation.

PTPd (http://ptpd.sourceforge.net/): Source code for a software implementatio

Real-Time Systems GmbH (http://www.real-time-systems.com/): IEEE 1588 P
Protocol (PTP) Master Implementations.

Semtech (http://www.semtech.com/Press-Releases/2008/semtech-debuts-tops
platform-with-worlds-first-integrated-ieee1588-ptp.html): Three ToPSyncTM sen
products: ACS9510, ACS9593 and ACS9550

Texas Instruments (http://www.ti.com/product/dp83630): The DP83640 Preci
Ethernet PHY chip with embedded IEEE 1588 hardware and application support.

Time and Frequency Solutions: (http://timefreq.com/products/ieee1588-ptp-sc
Grandmaster clocks

Wireshark: (http://www.wireshark.org/) A network protocol analyzer available
supports IEEE 1588.

Created October 22, 2010, Updated August 25, 2016