

TPRO/TSAT-PMC, cPCI and PCI series bus-level timing boards

## Timing board driver Release Notes

**Release Notes for the version 4.0.0 Linux driver update**

ECN3035

Dear valued Spectracom customer:

We at Spectracom Corporation continuously strive to improve our products. To this end, we have released a new version update of the Linux driver for the Spectracom TPRO/TSAT-PMC, TPRO/TSAT-cPCI as well as the TPRO/TSAT-PCI family of bus-level timing boards (including the TPRO/TSAT-PCI, TPRO/TSAT-PCI-U, TPRO/TSAT-PCI-U-2 and TPRO/TSAT-PCI-66U timing boards).

This driver update upgrades the Linux driver to version 4.00. The Linux driver updates include new features, capabilities and software enhancements. The Windows and Solaris drivers remain unchanged. Highlights of the Linux version 4.00 driver release (as well as previous Linux and Windows driver updates) are listed herein:

- Link to Linux driver updates: [Linux Driver updates](#)
- Link to Windows driver updates: [Windows Driver updates](#)

## Linux Driver updates

### New Features:

#### (Version 4.00)

- **Added support for the Spectracom Models TPRO/TSAT-PMC and TPRO/TSAT-cPCI bus level timing boards.**
  - Linux driver version 4.00 now also supports the TPRO/TSAT-PMC and TPRO/TSAT-cPCI timing boards, in addition to supporting the TPRO/TSAT-PCI series timing boards.
- **Updated the Linux driver to support newer kernel versions that have been released.**
  - The previously released TPRO/TSAT-PCI series Linux driver (version 3.30) supported Linux kernel versions from versions 2.6.9 to 2.6.39, as well as version 3.0.0 (resulting in potential problems with compiling the driver with kernel versions beyond 3.00 installed).
  - The previously released version of the TPRO/TSAT-PMC and cPCI Linux driver supported kernel versions to version 2.4.x (resulting in problems with compiling the driver with kernel versions beyond 2.4.x installed).
  - The new version 4.00 Linux driver now supports Linux kernel versions from versions 2.6.9 to 2.6.39, as well as versions 3.0.0 through 3.4.6.
- **Fixed a minor issue with the reported “Reach” value in the NTP peers response.**
  - When syncing the Linux machine to the installed timing board via NTP, the previously released Linux drivers (versions 3.30 and prior) always reported the NTP “Reach” peer value as “1”, instead of allowing it to increment to the expected value of “377”.

#### (Version 3.30)

- **Updated Linux driver to support newer kernel versions that have been released.**
  - The previously released Linux driver (version 3.20) supported Linux kernel versions of 2.6.9 through 2.6.35 (resulting in problems with compiling the driver with kernel versions beyond 2.6.35 installed).
  - The new version 3.30 Linux driver now supports Linux kernel versions from versions 2.6.9 to 2.6.39, as well as version 3.0.0.

#### (Version 3.20- Nov 2010)

- **Updated driver to support newer kernel versions that have been released.**
  - The previously released Linux driver (version 2.20) supported Linux kernel versions to version 2.6.25 (resulting in problems with compiling the driver with kernel versions beyond 2.6.25 installed). The new version 2.30 Linux driver now supports all version 2.4.x kernels as well as 2.6.x kernels from version 2.6.15 up to and including version 2.6.35.
- **Added shared library support (libtpro.so).**
- **Updated the NTP patch to support the current NTP revision of ntp-4.2.6p2.**

## Software enhancements:

### (Version 3.30)

- Fixed #define error in the NTP “tpro.patch”.

### (Version 3.20 - Nov 2010)

- Fixed issue with “GetSatInfo’ where the second digit for the number of satellites being tracked was being dropped.
  - Previously, the driver was only reporting the first of the two possible digits for the number of satellites currently being tracked (up to 12 satellites can be tracked simultaneously). So, the second digit, if there was one at that time, was being dropped.

**Example:** When tracking “10” satellites, it was reported as tracking “1” satellite, instead. Tracking 0 through 9 satellites was being reported correctly.

- Fixed several compile warning messages.
- Updated the NTP patch to support NTP revision ntp-4.2.6p2.

## Windows Driver updates

### New Features:

#### (Version 2.30 - Nov 2010)

- **Tested/Verified the Windows driver to be compatible with both Windows 7 and Windows Server 2008 (Supports both 32 bit and 64 bit Operating Systems).**
- **Added support for 64 bit library and DLL files (Supports both 32 and 64 bit Application software).**
  - Driver now includes both “Dev” and “Dev64” files.
- **Added a “version” tab to the Windows "TPRO.dll" file.**
  - In order to verify the version of the driver without having to run the driver, just right-click on this file and select Properties/Details. The version of the driver will be displayed.

### Software enhancements:

#### (Version 2.30 – Nov 2010)

- **Fixed issue with “GetSatInfo” API call where the second digit for the reported number of satellites currently being tracked was being dropped.**
  - Previously, the driver was only reporting the first of the two possible digits for the number of satellites currently being tracked (up to 12 satellites can be tracked simultaneously). So, the second digit, if there was one at that time, was not shown.

**Example:** When tracking “10” satellites, the GPS receiver was reported as tracking only “1” satellite, instead. Tracking 0 through 9 satellites was being reported correctly.

The new versions of the drivers can be downloaded from the Spectracom website. To obtain the driver update files, please visit:

<http://www.spectracomcorp.com/Support/HowCanWeHelpYou/Library/tabid/59/Default.aspx?EntryId=32>

Please contact one of the global Spectracom Technical Support centers for more information regarding any of these features or fixes:

**USA** | 95 Methodist Hill Drive | Rochester, NY 14623 | +1.585.321.5800 | [sales@spectracomcorp.com](mailto:sales@spectracomcorp.com)

**FRANCE** | 3 Avenue du Canada | 91974 Les Ulis, Cedex | +33 (0)1 64 53 39 80 | [sales@spectracom.fr](mailto:sales@spectracom.fr)

**UK** | 6A Beechwood | Chineham Park | Basingstoke, Hants, RG24 8WA | +44 (0)1256 303630 | [info@spectracom.co.uk](mailto:info@spectracom.co.uk)

Thank you for purchasing the Spectracom TPRO/TSAT-PMC, TPRO/TSAT-cPCI or TPRO/TSAT-PCI series timing board. Please let us know if you have any questions about this driver update or any other issues concerning your Spectracom equipment.

Sincerely,

The Spectracom Tech Support Staff