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Specification for

PCI bus based GPS Time Synchroniser

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PCI bus based GPS Time Synchroniser

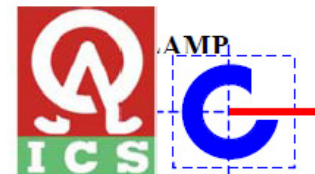


GPS Time Code Synchronizer is a standard 32bit PCI short card, Receives time information from GPS, It disciplines the local oscillator using external 1PPS or from the local GPS receiver to follow the GPS time. A micro controller monitors the behavior of 1PPS with respect to the local clock to maintain the local clock in the absence of GPS receiver. The PCI card has the other time related features like Rate Generator, Time compare and External event recording. While using on-board GPS receiver, location information can also be accessed from the PC directly from the GPS receiver.



Specifications:

- Time Synchronisation input
 - From external GPS Source
 - Differential with RS422 levels
 - Single ended TTL level
 - From internal GPS receiver time tick
 - Jumper selectable
 - Passive daisy chain to connect multiple cards to same input
- Time information input
 - Can read from external source with RS422 interface
 - UTC from onboard GPS receiver
 - From PC time
- Time data
 - up to microsecond through 32-bit PCI bus
- Up to 1 micro-second accuracy when sync. input is available
- Maintains the time with in $\pm 25\mu\text{Sec}$ of the reference for more than 20minutes (worst case time at 25°C)
- Interrupts
 - One of the following three interrupt sources can be activated and used all the three sources latch the time of occurrence
 - Programmable Rate Generator (1PPS, 10PPS and 100PPS)
 - Programmable time compare with individual mask register
 - External event.
- Software support (API provided for)
 - Windows 95/98/2000/XP
 - Linux
- Internal GPS receiver (Optional)
 - UBlox GPS MS1E



ISO 9001 : 2000
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