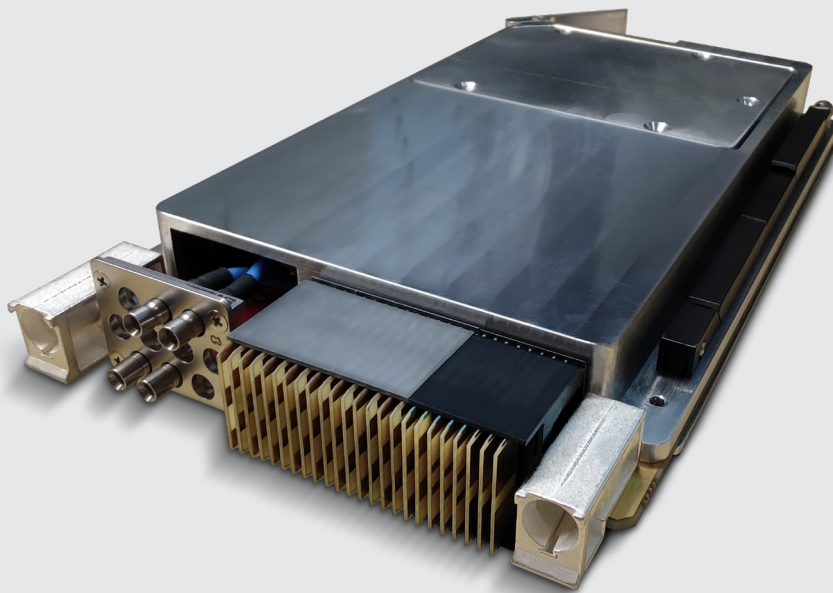


## CPNT – CMOSS PNT Card

Resilient Position, Navigation, and Timing in a Single Card



### Key Features

- M-Code Secure GPS
- Precision Clock (CSAC, OCXO)
- IMU
- Signals of Opportunity
- FlexFusion Engine
- GNSS Receiver
- BroadShield Threat Detection

### Accurate in All Conditions

- Secure M-Code GPS and Multi-Constellation GNSS capability
- High performance internal time-base and inertial sensor to manage potential loss of GNSS
- GNSS time and frequency source with NTP/PTP time server
- Integrate future PNT signal sources
- GNSS spoofing and jamming detection

### Flexible

- Highly versatile and software configurable
- Network sync, set-up and management
- Easy CMOSS Integration
- Compatible with external IMU's
- VICTORY compliant
- Low phase noise oscillators

## A Resilient Position, Navigation, and Timing (PNT) Sensor Fusion Platform

CPNT provides PNT assurance in a flexible, configurable device that allows your PNT-reliant system to function in disrupted GNSS environments. It fuses GNSS, inertial measurement, and high-performance timing oscillators with GNSS interference detection and CRPA/AJAS antenna compatibility to provide reliable, trusted PNT in current and future GNSS threat environments. The card serves as a navigation system, master clock, and network time server for CMOSS-compliant systems. The FlexFusion® sensor fusion engine combines complementary PNT signals, meaning superior PNT accuracy without resorting to the traditional brute-force, high-cost IMU approach. CPNT minimizes size, weight, power, and cost (SWaP-C) by combining PNT functions normally achieved through multiple independent subsystems, and it is ready for integration into a variety of CMOSS-compliant chassis.

## High Performance GPS Aided Inertial Navigation System (INS)

CPNT provides accurate positioning, attitude and orientation measurements, even in GNSS denied or disrupted environments. Measurement data is logged internally and streamed at a high output rate through the CMOSS backplane. CPNT is available with several GNSS receiver and IMU configurations, including M-Code.

## High-Performance Time Server

CPNT maintains an accurate internal timing signal via a low-phase noise oscillator, holding frequency and time accuracy for extended periods of GNSS disruption. It can also be re-synchronized by an external reference. Precise time and frequency signals are available as 1 PPS, unmodulated IRIG DCLS timecode, 10 MHz, and NMEA time-of-day messages. PTP and NTP servers provide accurate time distribution over an IP network.

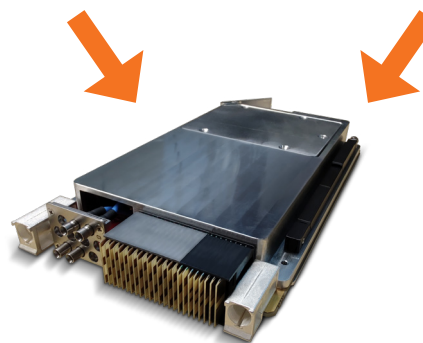
Built from our proven Versa platform, the CPNT card brings a solid PNT offering in a CMOSS-compliant package.



VPX Time Processor



VersaPNT



CMOSS/SOSA PNT Card



CPNT – CMOSS PNT Card  
Specifications subject to change or improvement without notice  
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