OnTime Networks launches NEW Cloudberry MIL CM-6200COMe ADVANCED MISSION MANAGEMENT SYSTEM (AMMS)

Oslo, Norway June 24, 2020 – OnTime Networks, a global leader for rugged, time synchronized Ethernet solutions for the aerospace and defense industries, announced today the introduction of the new Cloudberry MIL CM-6200COMe ADVANCED MISSION MANAGEMENT SYSTEM (AMMS) platform. The NEW CM-6200COMe AMMS is a turnkey all-in-one rugged mission management, communication, and compute platform, purpose-built to meet the requirements of modern fighting vehicles and airborne ISR platforms. It offers a high-performance Commercial Off-The-Shelf (COTS)-based, open-systems architecture platform that provides advanced interoperability for mission-critical, multi-sensored systems, configurable to meet the most demanding processing requirements for today’s military applications.

The CM-6200COMe AMMS meets Technology Readiness Level (TRL) 8 and has been incorporated into the Vetronics Architecture of a modern military wheeled combat ground vehicle as a core building block. The platform is designed for the harsh military environment and offers a wide operating temperature range [-32°C .. 63°C] with ruggedized military approved connectors. The unit is designed to comply to MIL-STD 810, 461F/G and 1275E.

The CM-6200COMe AMMS is built to meet the demands of today’s modern warfighter, with its powerful graphics and data processing, ultra-dense I/O, and feature rich capabilities in an ultra-robustness and extremely small form factor packaging. The unit is IP68 enclosed and designed to meet multiple environmental and rugged military standards, providing unlimited deployment capability into any extreme environment.

The CM-6200COMe AMMS is a highly scalable product family as it is based on a modular open system architecture that utilizes multiple COMe Type 6 and MXM boards with a specialized carrier board assembly. The design ensures fast time-to-market for many customer applications and combines high performance CPU and GPGPU processing capabilities, HD full motion video capture and encode, complete sensor integration and data fusion in a SWaP optimized system.
As technology advances and systems become more and more network-centric, platform capability requirements are rapidly growing. Modern mission systems must quickly adapt to the ever-changing mission needs by integrating new cameras, sensors, communications suites, weapons, and more.

Today’s mission management systems must meet size, weight, and power (SWaP) demands while providing the scalability and flexibility to handle all of the mission tasks today’s warfighter may encounter. In order to rapidly update systems to respond to the latest threats, system integrators must be able to provide shorter timeframes to field new mission management capabilities. That means going from development to deployment as quickly as possible.

The CM-6200COMe AMMS can provide the following capabilities in an all-in-one box solution:

- Gigabit and 10 Gigabit Switch with various fiber and copper options
- Various Software Router Options, including NIAP Certification for Commercial Solutions for Classified (CSfC)
- State of the Art Firewall
- Optional GPS Time Synchronization Server (IEEE 1588 PTP v1/v2, NTP, IRIG-B, PPS)
- Multiple Central Processing Units (CPU), up to the latest i7
- Multiple Graphics Processing Units (GPU)
- I/O Interfaces
- Video Processing
- Optional External Mass Storage Interface

The CPUs can be configured with most standard operating systems, including Linux or Windows. Further, the CM-6200COMe AMMS supports both GbE and 10GbE internal speed to each of the internal CPU boards, and the GPU boards can be omitted in case the built-in GPU of the CPUs are used instead.
As an example, the CM-6200COMe AMMS platform, with a managed gigabit and 10 gigabit Ethernet switch and 2x CPU/GPUs, offers the following interfaces:

- 12 x 10/100/1000BASE-T and 2 x RS422 (switch), PPS input (switch), Switch GPIOs and 2 x USB 2.0 in one D38999 128 pins D38999 connector
- 8 x 1000BASE-X of multi-mode (SX) or single mode (LX) fiber in 1 x D38999 connector with ARINC801 termini
- 2 x 10GBASE-X of multi-mode (SR) or single mode (LR) in 1 x D38999 connector with ARINC801 termini
- 4 x DVI (output) each with 2 x RS485 in 4 x Fischer Minimax 19 pins connectors
- 2 x USB 3.0 (for CPU1 and CPU2) for external mission data recorder in 2 x Fischer Minimax 9 pins connectors
- 28V power input for dual internal power supplies in a 6 pin Amphenol D38999 connector

The CM-6200COMe AMMS COTS building block approach simplifies technology insertion and product improvement activities by allowing distinct components of the system to change with minimal impact to the rest of the system.

Due to its configurability and flexibility, the CM-6200COMe AMMS can be used efficiently in a wide range of airborne, ground, and shipboard applications.

The CM-6200COMe AMMS platform has been specifically designed to operate reliably in the harsh climatically and noisy electrical demanding environments (e.g. high altitude, extreme shock, & vibration, wide temperatures, humidity, dust & water exposure, noisy EMI, dirty power) of military applications.

About OnTime Networks

OnTime Networks is a technology leader for rugged, time synchronized, fully managed, modular Gigabit Ethernet switches, specifically designed to operate reliably in the harsh and climatically demanding environments of the Aerospace and Defense Industry. Recognized for innovation and excellence, OnTime focuses on precise time over Ethernet according to IEEE 1588 (PTP) as core technology. For more information, please visit www.ontimenet.com.