nControl

MediaMatrix® Peavey Electronics Corporation

Industrial Network PC Server **Data Sheet**

DESCRIPTION

MediaMatrix nControl provides high-end processing power for NION control applications. It is particularly suited to running complex Python scripts and control functions distributed through very large systems.

While the powerful DSP capabilities of the NION process the audio in an installation, the nControl seamlessly complements the NION by handling the control, monitoring and scripting functions.

As well as providing raw processing power, the nControl can also record and play back multi-channel audio via CobraNet, and includes 200GB of storage for media files. Files can be copied to and from the nControl via FTP.

The audio interfacing capabilities of the nControl can be tailored to match the requirements of the installation by adding one or more 16 channel CobraNet interface cards. Similarly, one or more relay cards can be added to provide additional digital control inputs and relays for switching external devices, interfacing with switches, LEDs, custom circuitry, and so on. The unit also includes four RS-232 serial interface ports with support for further multi-function serial ports planned for a future version.

The nControl offers real time control and monitoring of network devices via SNMP. The system provides health and status information for devices such as Ethernet switches and uninterruptable power supplies (UPSs).

FEATURES

- Intel Pentium E2160 Dual Core 1.8GHz processor
- Two 250 GB 7200 RPM SATA-300 drives configured as RAID 1 array
- 2 Gigabit Ethernet ports, expandable to 10 Gigabit Ethernet
- Rackmountable, 3RU package
- Recording of WAV media files via CobraNet
- Playback of WAV and MP3 media files via CobraNet
- Monitoring and control of network devices
- Expandable GPIO for specific applications
- Support for multiple RS-232 serial interfaces
- Compatible with all NION models
- Support for SNMP, RATC and Python

Specifications

Front Panel

LED status window: Shows Power LED and Hard disk LED.
Lock: Secures front panel to chassis.

Behind front panel:
USB ports: Recessed port for hardware key and standard ports for inserting software update USB sticks.

Rear Panel Connections

Mains Power: 100v > 240v 47/63 Hz 500W A/C via dual redundant power supplies.
LAN: Dual female RJ-45 connectors for control and communications via Ethernet on Category 5e (CAT5) cabling. *
RS232 Serial: Male DB-9 supports general purpose RS-232 communications.
PCI expansion slots: Seven expansion slots for inserting cards. See "PCI Expansion Cards" section.
Monitor, keyboard and mouse ports: Provide direct control of the nControl for configuration and management.

PCI Expansion Cards (available separately)

CobraNet audio card: Supports 16 channels of mono or stereo PCM audio.
Relay card: Supports 8 relay output channels and 8 isolated digital input channels with LED indicators to show active relays.

Mechanical Specifications

Chassis Style: 3RU EIA rack package.
Dimensions: 482.6mm (19 in.) W x 416mm (16.4 in.) D x 130mm (5.1 in.) H.

* Either connector can be used, but redundancy is not currently supported.

Architect's & Engineer's Specifications

Auxiliary Processing System

The auxiliary processing system shall be a 3RU industrial package designed for fixed installation in engineered audio and communications systems. The unit shall include an architecture based on an Intel Pentium Dual Core processor. The unit shall be completely configurable via a Windows-based software utility, a web interface or directly, via a Windows interface provided by the unit. The Windows-based software utility shall also provide tools to allow integration with third-party control systems. Support shall be included for standard Ethernet management, including, but not limited to SNMP, via an integrated, rear-panel LAN port. The auxiliary processing system shall include an embedded Windows operating system. The operating system shall reside on non-mechanical IDE storage media. The storage system shall include support for reading/writing data from the operating system and configuration software. Audio file support for .wav audio shall be standard and shall be completely integrated with the unit's software tools. The auxiliary processing system shall include a modular I/O card bay system for support of up to seven PCI expansion cards. The auxiliary processing system shall include support for serial data transport via the RS-232 port. The auxiliary processing system shall include monitor, keyboard and mouse ports for direct control and configuration. All data transports, including Ethernet, shall be available simultaneously. The audio processing node shall include a lockable front panel. Behind the front panel there should be a recessed USB port for a hardware key and standard USB ports for inserting software update USB sticks. There shall also be status LEDs for monitoring hard disk activity and supply of power. The auxiliary processing system shall be fan-cooled and operate with dual, modular universal computer-grade power supplies.
The auxiliary processing system shall be the MediaMatrix nControl or approved equal.

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