BAE SYSTEMS

Network attached storage (NAS)

The BAE Systems network attached storage device is a high performance server capable of handling the protocol processing associated with high speed communications interfaces while maintaining data storage and retrieval to and from a solid state storage system. It is designed to meet aerospace environmental conditions.

The ARINC 600 MCU 2 form factor provides excellent performance in a compact, lightweight (8lbs) package.

The use of a server-class processor facilitates the serving of data via high speed Ethernet communication interfaces. The Intel Xeon® Pentium D-1519 system-on-chip processor offers the greatest power density (highest power per watt) and functional performance capable of handling peak processing that allows for 6 Gbps sustained throughput.

A removable storage module provides an array of 4,16 TB drives with dedicated SATA interfaces to the processor. These drives possess configurable encryption, supporting AES256. The removable nature of the module allows for ease of access to data that can be securely transported for download and review. Easy module replacement enables quick turnaround for time critical applications.

Key parameters

Applications	Network file transfer/storage video recording/replay/offload
Size	Size per ARINC 600 MCU 2
Weight	8 lbs
Power	115 VAC, 360 – 800 Hz, single phase 200 msec holdup
Interfaces	x1 RS-232 (front panel) x1 USB 3.0 (front panel) x1 SDXC reader (front panel)
Processor	Intel® Xeon Pentium D1519
Memory	16 GB DDR4 with ECC (two banks)
Network	x2 10GBASE-SR (rear ARINC 600) (optical) x2 1000BASE-T (rear ARINC 600) x1 1000BASE-T (front panel)
Storage	Expandable storage via front panel USB and SDXC x1 removable storage module (Expandable up to 64TB) Supports RAID 0, 1, 5 Array of 4, 16TB SSD Modules
Discrete interface	x5 input discrete (rear ARINC 600) x2 dedicate (programming) input discrete (rear ARINC 600) x5 output discrete (rear ARINC 600)
Security	Configurable drive encryption Supports AES256 encryption Replaceable drive encryption keys Security data logging Built-in firewall 802.1x port security NFSv4 Kerberos support TLS secured management API
Software	Linux OS Loadable via ARINC 615A Video recording management, playback and retrieval Configurable via command line interface, Web UI, configuration file, and REST API NFS file transfer SNMP V2/V3 Built-in test equipment monitoring Network time protocol (NTP) support
Temperature	-40°C to 70°C continuous operation Blow through cooling

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