Hawk-Strike_® IV

Workstation-Class Mission Computer





Lifecycle Stage: Active | Qualified Production

systelusa.com/hawk-strike-iv

Product Brief

Hawk-Strike IV is a fully rugged, single line replaceable unit (LRU) multi-mission workstation-class embedded compute solution, purpose-built for deployment in austere environments for demanding defense and commercial applications.

Hawk-Strike IV offers robust IO and system expansion for a true single LRU solution with centralized and converged sensor ingest, processing, networking, storage, controls, and distribution-supporting the mission with reliable tactical processing and communications enabling capabilities.

Hawk-Strike IV is ideal for x86-based highperformance computing applications with a GPU for parallel processing with low latency of data-intensive workloads.



Key Features

- COM Express Type 6 Architecture
- Latest Intel Xeon or Core mobile CPU
- Latest NVIDIA embedded GPU
- Memory: up to 64GB DDR4
- Storage: (2) removable 2.5" SSDs up to
 4TB each; internal mSATA storage
- Dense IO including multiple GbE, USB, serial, audio, GPIO, DVI
- Significant PCle-based system expansion capabilities; highly configurable
- Security: supports data at rest (DAR) and data in transit (DIT); onboard TPM 2.0; supports FIPS 140-2 and AES 256 encryption; Intel TXT and SGX
- MIL-SPEC rugged and fully sealed
- Operating temperature up to -46C to +60C (passive cooled)
- Engineered with a standards-based approach utilizing open architectures and COTS technologies
- Designed using a Modular Open Systems Approach (MOSA)



HAWK-STRIKE IV DATA SHEET

Hawk-Strike IV Specifications

Model Number: EC7030

Systel 3-Year Product Warranty EOL and Configuration Management Included



System Specs

Chassis

- Material: machined aluminum
- Finish: black anodized exterior, clear alodine interior
- Mounting: base mounting

SWAP

- Chassis Dimensions: 8.50"W x 13.25"D x 5.05"H
- Weight: ~16lbs (config dependent)
- Power: 28VDC, 200W max (integrated, nonisolated power supply)

Processing

- CPU: (1) Intel mobile with TPM 2.0; standard is Xeon E-2276ML 9th gen, 6 cores, 2.00/4.20 GHz
- GPU: (1) embedded NVIDIA; standard is RTX A1000 (Ampere; 2048 CUDA cores, 16 RT cores, 64 Tensor cores; 4GB) or RTX A2000 (Ampere; 2560 CUDA cores, 20 RT cores, 80 Tensor cores, 6GB)
- Memory: up to 64GB DDR4 ECC dual-channel

OS

Supports Windows and Linux 64-bit (please consult with a Systel sales representative for specific OS requirements)

Base System

Connectors

System **Expansion**

Storage

- Ethernet: (2) GbE
- USB: (2) USB 3.0, (2) **USB 2.0**
- Serial: (2) RS422 (485 is built-time option), (3) RS232 RX/TX only
- Video Output: (2) HDMI/ DVI (from CPU); (2) HDMI/DVI (from GPU if populated)
- Audio: stereo headphone and mic

MIL-DTL-38999 for IO and

power; 2M801 for USB 3.0; SMA or HD-BNC for RF

Numerous options including GbE switch, CAN, video capture and encode (multiple formats and types), LTE, GPS, GPIO, ARINC 429, 1553.

- (2) mPCle
- (2) PCIe/104 type 2
- Other interfaces available (ex: USB)
- (2) removable 2.5" SSD drive bays, SATA III up to 4TB each. FIPS 140-2 options
- Internal (nonremovable) mSATA options via mPCle expansion up to 1TB



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Environmental Specs

Operating Temp Qualified to -46C to +55C, Tested to +60C (passive cooled)

MIL-STD-810H, Method 501.7, Proc. II; Method 502.7, Proc. II;

Non-Operating Temp Qualified to -55C to +85C

MIL-STD-810H, Method 501.7, Proc. I; Method 502.7, Proc. II

Vibration Qualified to MIL-STD-810H, Method 514.8, Proc. I, Cat. 4, C-V, Composite Two-

Wheeled Trailer

Shock, Functional Qualified to MIL-STD-810H, Method 516.8, Proc. I, 40g at 11ms, Ground

Shock, Crash Hazard Qualified to MIL-STD-810H, Method 516.8, Proc. V 75g at 6ms, Ground

Altitude MIL-STD-810H, Method 500.6, Proc. II, 50k feet*, Operating

*thermal derating may occur

Humidity MIL-STD-810H, Method 507.6-7, Proc. II, RH 95%, 60C, Aggravated

Sand and Dust MIL-STD-810H, Method 510.7, Proc. I and II; IP6X: IEC60529:2013 Section 4.2.7

Fluid Ingress MIL-STD-810H, Method 506.6, Proc. II; IPx7: IEC60529:2013 Section 4.2.7

EMI/EMC Tested to CS101

Power Tested to MIL-STD-1275E Section 5.3.3.1.1, Section 5.3.3.1.2, Section 5.3.3.2.2,

Section 5.3.4; Tested to MIL-HDBK-704-8 LDC102, LDC104, LDC301, LDC401,

LDC602



All specifications are configuration-dependent and subject to change. Please contact a Systel sales representative to discuss your configuration.

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