RAVEN-STRIKE II DATA SHEET

Raven-Strike® II Enterprise Server-Class Mission Computer



Lifecycle Stage: Active | Pre-Qualified Production

systelusa.com/raven-strike-ii

Product Brief

Raven-Strike II is a MIL-SPEC rugged serverclass compute solution, purpose-built for highly intensive workloads in austere environments.

Configured with the latest gen Intel Xeon SP CPU and NVIDIA GPU, Raven–Strike II features server–class processing capability to power mission–critical applications. Raven–Strike II is highly configurable with robust IO capabilities, including high–bandwidth networking. Raven– Strike II also offers up to (4) high–capacity, high–speed removable SSDs to securely store mission data.

Raven-Strike II is engineered to withstand the harshest environments on the planet, bringing data center compute to the tactical edge.



Key Features

- Size: 11.7"W x 18.2"D x 7.9"H
- Weight: ~37bs (configuration dependent)
- Processing: 3rd gen Intel Xeon SP CPU (up to 205W) and NVIDIA Ampere GPU (up to 230W)
- Power: integrated DC/DC power supply, 28VDC nominal
- Immense IO and configurability options including multiple USB 3.0, 10GbE, DP++; system expansion options include up to 100GbE fiber, video capture and encode, GbE switch, GPS
- Up to (4) removable high-capacity SSDs
- MIL-SPEC rugged and fully sealed
- Operating temperature up to -40C to +55C (active cooled with heaters)
- Engineered with a standards-based approach utilizing open architectures and COTS technologies
- Designed using a Modular Open Systems Approach (MOSA)



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Raven-Strike II Specifications

Model Number: EC7410

Systel 3-Year Product Warranty EOL and Configuration Manageme<u>nt Included</u>

System Specs

Chassis

- Material: machined aluminum
- Finish: black anodized exterior, clear alodine interior
- Mounting: base mounting
- Chassis Dimensions: 11.71"W (13.42" with mounting) x 18.17"D (19.819" with connectors) x 7.905"H
- Weight: ~37lbs (config dependent)
- Power: 28VDC, standard config max power ~500W, max system power 820W (galvanically isolated power supply)
- microATX motherboard (1) 3rd gen Intel Xeon scalable processor up to 205W TDP
- (1) NVIDIA Ampere GPU up to 230W TDP
- Up to 1TB ECC RDIMM
 DDR4-3200 memory
- (1) Server Trusted
 Platform Module (TPM)
 2.0
- Supports Windows and Linux 64-bit (please consult with a Systel sales representative for specific OS requirements)

Base System

- USB: (2) USB 3.0, (4) USB 2.0
 Ethernet: (2) 10GbE,
- (4) GbE, (1) IPMI GbE
- Serial: (1) RS232
- Video Output: (4) Display Port (from GPU), (1) VGA (onboard)

MIL-DTL-38999 for IO

on rear side of system);

rugged circular field for

USB 3.0 and 10GbE;

options available

rugged RF connector

and power (power located

Connectors

System Expansion

Numerous options including up to 100GbE

- fiber, video capture and encode, GbE switch, GPS
- (2) PCIe 4.0 x16
- (1) m.2 x4 m-key
 2242/2280
- Other interfaces available (ex: USB)
- Storage
- Up to (4) removable 2.5" SSDs (2 drive bays), SATA III up to 4TB each, FIPS 140-2 options
- Internal (nonremovable) 1TB m.2 NVME option





SWAP (base model)

Processing

OS

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Environmental Specs

Operating Temp	Tested to -40C to +55C (forced air convection cooled with internal heaters and stir fans) MIL-STD-810H, Method 501.7, Proc. II; Method 502.7, Proc. II
Non-Operating Temp	–55C to +85C MIL–STD–810H, Method 501.7, Proc. I; Method 502.7, Proc. II
Vibration	Tested to MIL-STD-810H, Method 514.8, Proc. I, Cat. 4, C-II, Common Carrier (US highway truck vibration)
Shock, Functional	MIL-STD-810H, Method 516.8, Proc. I, 40g at 11ms, Ground
Shock, Crash Hazard	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	MIL-STD-461G, CE101, CE102, CS101, CS114, CS115, CS116, RE101, RE102, RS101, RS103
Power	MIL–STD–1275E; MIL–HDBK–704–8 *no power hold-up

Unless otherwise noted, all environmental specifications are designed to meet with testing pending. "Qualified to" indicates that certified 3rd party testing has been successfully completed. All testing completed on base model unit(s).





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

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