

Kite-Strike™



Fully Rugged Embedded Edge Supercomputer *Mini. Mighty. Modular.*

Key Product Features

- NVIDIA® Jetson AGX Xavier™ SOM
- GPU: NVIDIA® Volta Architecture, 512 CUDA Cores and 64 Tensor Cores
- CPU: 8-Core Carmel ARM v8
- Memory: 32GB
- Storage: Onboard 32GB eMMC; Internal m.2 NVME up to 1TB
- Dense I/O Including Multiple GbE, USB, CAN
- DC/DC Power Supply 28VDC Nominal
- MIL-STD-810H Shock and Vibration
- MIL-STD-461G EMI/EMC
- MIL-STD-1275E and MIL-STD-704F Power
- IP66 Sealed Dust/Water Ingress
- -40°C to +71°C Operating Temperature
- Linux Ubuntu 18.04 OS
- Foldable Handle for Easy Carry and Handling
- Expansion Slice Design for Modular System Expansion

Product Highlights

Kite-Strike™ is a next-generation embedded edge supercomputer. Integrating the NVIDIA® Jetson AGX Xavier™ system-on-module, Kite-Strike™ is purpose-built for deployment in harsh environments, offering maximum capability and reliability in a compact form factor.

Kite-Strike™ enables real-time AI inferencing and Deep Learning (DL)/ Machine Learning (ML) capabilities and provides centralized sensor ingest and data fusion support.

Kite-Strike™ provides the advanced computing capability and ruggedization demanded for mission-critical applications, and is fully configurable and modular to meet exacting customer specifications.

Kite-Strike™ is engineered and manufactured for extreme SWaP optimization and incredible compute capability, offering data center performance in a compact, fully rugged embedded edge computer.

Systel, Inc.

Phone: 877-979-7835

Email: sales@systelusa.com

www.systelusa.com

Fanatical Customer Service | Passion for Improvement | Strong Work Ethic | Integrity



Specifications

ENCLOSURE

Material	Black Anodized Machined Aluminum Exterior, Clear Alodine Interior; CARC/RAL Finish Options Available
Ctrl/Indicator	Power with Green LED
Dimensions	(WxDxH) 6.75" x 6.75" x 4.00"
Sealing	O-ring Sealed for IP66 Dust/Water Ingress Protection
Cooling	Conduction/Convection with Integrated External Rugged Forced Air Cooling Solution

System-On-Module

SOM	NVIDIA® Jetson AGX Xavier™
CPU	8-Core Carmel ARM v8, 64-Bit
GPU	Volta Architecture, 512 CUDA Cores, 64 Tensor Cores
Memory	32GB LPDDR4x 2133
Storage	32GB eMMC 5.1
Vision Accelerator	7-Way VLIW Vision Processor
Video Encode	Up to 4 x 4K @60 HEVC
Video Decode	Up to 2 x 8K @ 30 HEVC

System I/O

Serial	(4) RS-232/422/485
Ethernet	(2) GbE
USB	(1) USB 3.0, (2) USB 2.0
CAN	(2) CAN 2.0
Video Output	(1) HDMI/DVI
Audio	(1) Stereo Line Out and Mono Mic In
Connectors	MIL-DTL-38999; High-Speed I/O May Use Circular Field or Coax/DIN/BNC
Expansion	Numerous Options Including Video Capture/Encode, ARINC 429, 1553, LTE, GPS, Additional GbE/USB/Serial/CAN

Storage

Internal

32GB eMMC onboard Xavier SOM; m.2 NVME up to 1TB; Removable Options Available

Power

Power

Galvanically Isolated DC/DC Power Supply; Wide Range Voltage with 28VDC Nominal Conforming to MIL-STD-1275E

Environment

Temperature

-40°C to +71°C, Operating
-40°C to +85°C, Storage

Altitude

MIL-STD-810H Method 500.6 Procedure I and II, 30,000 Ft..

Humidity

MIL-STD-810G Method 510.6, Proc. I; MIL-STD-810H Method 507.6, Proc. I Up to 95% RH Non-Condensing

Shock

MIL-STD-810G Method 516.7, 20g @11ms; MIL-STD-810H Method 516.8, Proc. 1, 40g @ 11ms; MIL-STD-810H Method 516.8, Proc. V, 75g @ 6ms

Vibration

MIL-STD-810G Method 514.7, Proc. I, Category 20 Ground Vehicles-Ground Mobile; MIL-STD-810H Method 514.8, Proc. I, Category 4, C-IV

Power

MIL-STD-1275E; MIL-STD-704F (No Power Holdup)

EMI/EMC

MIL-STD-461G RE102, RS103, CS101, CS114, CS115, CS116, CE101, CE102; MIL-STD-464C Section 5.11

Sand and Dust

MIL-STD-810G Method 510.6, Proc. I; MIL-STD-810H Method 510.7, Proc. II; IP66 Sealed

Fluids/Rain

MIL-STD-810G Method 504.2, Proc. II; MIL-STD-810H Method 506.6., Proc. I