

# Osprey-Strike™



## Next Generation C5ISR Multi-Sensor Rugged Embedded Solution

### Key Features

- Small Form Factor COM Express Embedded System
- Intel Xeon-D 12 Core CPU
- NVIDIA GTX1050 GPGPU - 768 CUDA Cores
- (4) x Removable 1TB SSDs in Custom Carrier - Extended Temp with AES 256 Encryption
- (2) x XMC Slot Frame Grabbers
- H.264 Video Encoder
- (4) x 3G-SDI In, (4) x 3G-SDI Out, (2) x DVI
- (2) x 10GbE Connections
- 8 Port Managed 10/100/1000 Switch
- Optional Rugged GPS Module
- Cable Free Board to Board Connections to I/O Panel
- MIL-STD-810G, MIL-S-901D, MIL-STD-461G, MIL-STD-704F, MIL-STD-1275E, MIL-STD-167A, IP67 Ingress Protection
- -40°C to +70°C operating temperature

### Product Highlights

Osprey-Strike™ is a rugged high performance multi-sensor compute solution ideal for C5ISR mission-critical applications.

Osprey-Strike is a best of breed mission system featuring ultra dense embedded capabilities.

With multiple parallel processing channels, Intel Xeon-D 12 core CPU, NVIDIA GTX1050 GPGPU, dual XMC module Frame Grabbers, Video Encoder, GPS Module, 10Gb Ethernet support, and designed to meet a wide variety of stringent military environmental certifications, Osprey-Strike is designed to be a single Line Replaceable Unit.

It is a fully sealed system with an operating temperature range of -40 to 70C. It is extremely versatile and can be deployed in any number of platforms including airborne and ground vehicle. Osprey-Strike can be custom configured for any ISR/ISTAR/RSTA application.

**Systemel, Inc.**

**Phone:** 877-979-7835

**Email:** sales@systemelusa.com

www.systemelusa.com



# Specifications

## ENCLOSURE

- Material** Black Anodized Machined Aluminum
- Indicators** Power/Reset
- Controls** Power/Reset Switch
- Dimensions** (W x D x H) 12" x 10.75" x 5.25"
- Sealing** O-Ring for IP67 Ingress Protection

## System Board

- Form Factor** COM express type 7
- CPU** Intel Xeon-D 12-Core CPU (Long Life)
- Memory** (2) x 16GB DDR4-2133 SO-DIMM
- Ethernet** (2) x 10GbE

## Imaging Module

- Type** (2) x XMC Graphics Card with Video Capture
- Video Inputs** (4) x 3G-SDI, HD-SDI, or SD-SDI
- Video Outputs** (4) x 3G-SDI, HD-SDI, or SD-SDI  
(4) x DisplayPort or HDMI

## GPGPU Module

- Type** NVIDIA GTX1050M 768 Cuda Cores  
8K 7680 x 4320 Resolution Support  
HDMI 2.0 Support

## Power

- Power Supply** 375W DC-DC Power Supply Isolated and Filtered for MIL-STD-461G, MIL-STD-1275E, MIL-STD-704F

## RUGGEDIZATION

- System** 10 Point Survivor Technology



## Storage

- Removable** (4) x 1TB SSD Extended Temperature with AES 256 Encryption in Custom Removable Carrier

## External Connectors

- Main I/O** (4) x USB 3.0/2.0, (6) x HDMI, (7) x RS232/RS422, (2) x GPIO In, (2) x GPIO Out
- LAN** (2) x 10GbE, (7) x 10/100/1000 Ethernet
- Power** +18 to +60 VDC Filtered
- Video Inputs** (4) x 3G-SDI In, (4) x 3G-SDI Out (BNC Connectors)
- GPS** GPS Antenna and I/O (RS232, 1PPS)

## Environment

- Temperature** -40°C to +70°C, Operating  
-40°C to +85°C, Storage
- Altitude** >15,000 ft. (testing dependant)
- Humidity** 5% to 95% Non-condensing
- Vibration** MIL-STD-810G, Method 514.5, Proc 1, Cat 14; MIL-STD-167A
- Shock, Crash** MIL-STD-810G, Method 516.5, Proc 1 and Proc V; MIL-S-901D Grade A "Barge Test"
- EMC** MIL-STD-461
- Dust/Water Ingress Protection** IP67

### MIL-STD-810G Shock and Vibration.

Note: Systel maintains an on-site environmental lab for shock and vibration testing. As an added benefit we can test the many different combinations for operating and non-operating profiles to meet transportation, airframe and shipboard applications.