QUALITY & STANDARDS

- ISO 9001:2015 CERTIFIED
- CANADIAN CONTROLLED GOODS
- ITAR CERTIFIED, US JOINT CERTIFICATION
- MIL-STD-810H, DO-160G FOR SHOCK & VIBRATION
- INGRESS PROTECTION
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NOTE: Specifications found in this guide are subject to change without notice.
AGX Orin™ Inference Server

The AGX Orin™ Inference Server is a high performance AI workstation powered by 12x NVIDIA Jetson AGX Orin Modules. Ready to run NVIDIA’s most powerful deep-learning software.

- 12x 275 TOPS, 2048-Core Ampere GPU and 64 Tensor Cores
- 4x 10G SFP+ uplink capability
- Up to 2TB of NVMe Storage per module
- 2U ATX style redundant PSU

Anvil for AGX Orin™

Ready to withstand the most compute intensive AI applications with its power-efficient and feature rich design. Seamlessly deploy your next generation autonomous vehicle, smart city application, or vision solution.

- 2x 10G Ethernet
- 8x GMSL2, FPD-Link III or HD-SDI camera inputs (optional)
- 2x NVMe M.2 M-Key, 1x B-Key, and 1x E-Key
- USB 3.2, External PCIe
- Wide Input Power Range

UAGX2U

COMING SOON:

AGX ORIN RUGGED EMBEDDED SYSTEMS

- IP67 Rated
- Choose from M12 or MIL-STD 38999 connectors
- Ideal for applications where shock and vibration are a concern

Graphite VPX/AGX Orin

GraphiteVPX/AGX Orin is a 3U peripheral card that brings the NVIDIA® Jetson AGX Orin™ to the highly rugged embedded VPX marketplace. The GraphiteVPX/GPU Orin features USB 3.2, DisplayPort, and an internal NVMe.

- 3U VPX SOSA Aligned
- NVIDIA® Jetson AGX Orin™ Industrial
- PCIe x8 Gen4 (Endpoint or Host)
- 2x 10GBASE-KR Ethernet
- Complete IMPI Support
- Industrial NVMe 1TB/2TB
- USB 3.2, DisplayPort, 1GBASE-T, GPIO, UART, Debug, OTG Flashing via front panel

VPG004

NEW!

NEW!
CARRIER BOARDS

Forge
Full-featured Carrier Board for the NVIDIA® Jetson AGX Orin™. This carrier board is specifically designed for commercially deployable platforms.

- 2x 10G Ethernet
- 2x NVMe M.2 M-Key, 1x M.2 B-Key, and 1x M.2 E-Key
- USB 3.2, PCIe x4 OCuLink connector
- Wide Input Power Range: 10V-36V DC

Rogue for AGX Orin™
Small Form Factor Carrier Board for the NVIDIA® Jetson AGX Orin™. Rogue for Orin is specifically designed for commercially deployable platforms, and has an extremely small footprint of 92 x 107mm.

- 2x 10G Ethernet
- Extremely small form-factor (Same size as AGX Orin module)
- 2x NVMe M.2 Key Slots
- 3x USB 3.2

Rogue-RX for AGX Orin™
Rogue-RX is a full featured carrier board specifically designed for rugged and harsh environments. Provides rugged positive locking high-speed connectors.

- Rugged positive locking connectors
- 2x 10G Ethernet
- Extremely small form-factor (Same size as AGX Orin module)
- 2x NVMe M.2 Key Slots
- 3x USB 3.2

AGX201
AGX202
AGX203
This expansion board supports up to 8x GMSL1 or GMSL2 cameras to be connected to all AGX Xavier™ and AGX Orin™ Carrier Boards.

- GMSL1 or GMSL2 protocols
- Internal or External Camera power
- Allows longer length cabling with a direct path to the Jetson AGX ISPs
- Power over Coax; 4x mini coax connector

FPD-Link III Camera Board

This expansion board allows for the connection of FPD-Link III Deserializers to be connected to Jetson AGX Xavier and AGX Orin Carrier Boards.

- 8x FPD-Link III camera inputs, 2x per deserializer
- 16-lane MIPI output; single 4-lane MIPI CSI-2 per deserializer
- Power over Coax
- Internal or External Camera power
CAMERA BOARD COMPARISON CHART

<table>
<thead>
<tr>
<th>Part Number</th>
<th>HDMI Vision Camera Platform</th>
<th>Allied Vision MIPI Camera Board</th>
<th>GMSL Camera Board</th>
<th>FPD-Link III Camera Board</th>
<th>Jetson SDI Vision Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>JCB010</td>
<td>JCB005</td>
<td>JCB002</td>
<td>JCB006</td>
<td>JCB003</td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>75mm x 52mm ( (2.95'' \times 2.05'') )</td>
<td>75mm x 40.2mm ( (2.95'' \times 1.58'') )</td>
<td>75mm x 57mm ( (2.95'' \times 2.24'') )</td>
<td>75mm x 57mm ( (2.95'' \times 2.24'') )</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>23g</td>
<td>19g</td>
<td>50g</td>
<td>37g</td>
<td>53g</td>
</tr>
<tr>
<td>Connector</td>
<td>1x High Density Connector Camera Board will mate to the Camera Expansion Header on the Rogue, Rogue-X, Forge and Rogue for Orin, and Rogue-RX Carrier Boards</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camera Inputs</td>
<td>4x HDMI Inputs</td>
<td>Up to 6x MIPI CSI-2 ( (6x 4-lane or 6x 2-lane) )</td>
<td>8x Total ( (GMSL2/GMSL1) )</td>
<td>8x Total</td>
<td>2x 3G-SDI Inputs ( (HD-BNC) )</td>
</tr>
<tr>
<td>Deserializer</td>
<td>A single 4-lane MIPI CSI-2 output from each Bridge ( (16-lanes total) )</td>
<td>A single 4-lane MIPI CSI-2 v1.3 output from each Deserializer ( (16-lanes total) )</td>
<td>A single 4-lane MIPI CSI-2 v1.3 output from each Deserializer ( (16-lanes total) )</td>
<td>4-lane MIPI CSI-2 v1.3 output per SDI Input ( (8-lanes total) )</td>
<td></td>
</tr>
<tr>
<td>MIPI Output</td>
<td>N/A</td>
<td>Maxim MAX9296A</td>
<td>Texas Instruments DS90UB954</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Camera Input Connectors</td>
<td>2x KEL USL00-30L 2x HDMI Type D (Micro HDMI)</td>
<td>6x MIPI CSI-2 connectors to interface to Allied Vision Alvium cameras</td>
<td>2x MATE-AX Quad Coax Connectors Breakout cables to FAKRA available</td>
<td>2x MATE-AX Quad Coax Connectors Breakout cables to FAKRA available</td>
<td>2x Right Angle HD-BNC Connectors</td>
</tr>
<tr>
<td>Power</td>
<td>Directly powered from Camera Expansion Header</td>
<td>All 8 cameras will be sourced Power-Over-COAX from JCB002</td>
<td>All 8 cameras will be sourced Power-Over-COAX from JCB006</td>
<td>+12V is available from Camera Expansion Header as external connector if more power is required</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-30°C to +70°C ( (-22°F to +158°F) )</td>
<td>-40°C to +85°C ( (-40°F to +185°F) )</td>
<td>-40°C to +85°C ( (-40°F to +185°F) )</td>
<td>-40°C to +85°C ( (-40°F to +185°F) )</td>
<td></td>
</tr>
</tbody>
</table>

Allied Vision MIPI Camera Board
This Camera Board allows for direct connectivity for up to six MIPI sensors without the need of additional hardware components.

- Simple integration of Allied Vision MIPI CSI-2 sensors to the Jetson AGX Xavier™ and AGX Orin™ platforms.
- Connect up to 6x 2-lane or 4x 4-lane MIPI Cameras
- Seamless integration to Jetson AGX Xavier and AGX Orin Carrier Boards

JCB005
### Hadron Carrier Boards

**Hadron Dual MIPI**
A compact solution for vision applications and unmanned payloads. With rugged latching connectors, it ensures secure connectivity in any environment.
- 2x USB 3.1, 1x GbE, 1x 2242/2230 NVMe, 1x M.2 E-Key (WiFi/BT)
- GPIO, PWM, I2C, RS-232, 3.3V UART, SPI
- Wide Input Range: +9V to +60V

**Hadron GMSL**
Boasting dual GMSL2 camera inputs, Hadron GMSL ensures high-speed, dependable data communication, crucial for autonomous applications.
- 2x USB 3.1, 1x GbE, 2x GMSL Coax Ports
- 1x NVMe M-Key, 1x M.2 E-Key
- 1x 1000BASE-T with Rugged Positive Locking Pin Headers

**Hadron**
The Hadron Carrier Board for Orin™ NX is an ultra small, rugged and feature-rich carrier for AI Computing at the Edge. Just slightly larger than the Jetson™ SODIMM module.
- Tiny footprint: 82.6mm x 58.8mm (3.25” x 2.31”)
- 2x USB 3.1, 1x GbE, 1x 4-lane MIPI CSI-2, 1x USB OTG
- Wide power input - +9V to +60V DC

### Specifications

<table>
<thead>
<tr>
<th>Hadron</th>
<th>Hadron GMSL</th>
<th>Hadron Dual MIPI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part Number</strong></td>
<td>NGX012</td>
<td>NGX018</td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td>82.6mm x 58.8mm (3.25” x 2.31”)</td>
<td>82.7mm x 68.8mm (3.25” x 2.71”)</td>
</tr>
<tr>
<td><strong>Ethernet</strong></td>
<td>1x 1000BASE-T with Rugged Positive Locking Pin Headers</td>
<td></td>
</tr>
<tr>
<td><strong>USB</strong></td>
<td>2 x USB 3.1 (Gen 1) 1x USB 2.0 Programming Port</td>
<td>2x USB 3.2 Gen 1x1 (5 Gbps) with Rugged Positive Locking Pin Header</td>
</tr>
<tr>
<td><strong>Camera Inputs</strong></td>
<td>1x 4-lane MIPI CSI-2</td>
<td>2x GMSL2 Camera inputs w/ PoC</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>1x 2242/2230 NVMe (M-Key)</td>
<td>1x 2242 NVMe (M-Key)</td>
</tr>
<tr>
<td><strong>Misc Interfaces</strong></td>
<td>1x 3.3VTTL UART (CONSOLE) 2x RS-232 Serial Ports 4x PWM capable GPIO 1x 3.3V I2C, 1x 3.3V SPI</td>
<td>1x CAN 2.0b 1x 3.3VTTL UART (CONSOLE) 2x RS-232 Serial Ports 4x PWM capable GPIO 1x 3.3V I2C</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>+9V to +60V DC (+12V to +48V DC Nom.)</td>
<td></td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>49g</td>
<td>58g</td>
</tr>
<tr>
<td><strong>Temperature</strong></td>
<td>-25°C to +85°C (-13°F to 185°F)</td>
<td></td>
</tr>
</tbody>
</table>
### Boson CARRIER BOARDS

<table>
<thead>
<tr>
<th>Boson for Orin</th>
<th>Boson-22</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part Number</strong></td>
<td>NGX020</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>1x HDMI 2.0</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>1x M.2 M-Key (2280) NVMe PCIe x4 (Gen 3)</td>
</tr>
<tr>
<td><strong>Expansion</strong></td>
<td>1x 2230 E-Key Expansion for WiFi/Bluetooth 1x PCIe x1 + USB 2.0</td>
</tr>
<tr>
<td><strong>Vision</strong></td>
<td>MIPI CSI x4 Connectors</td>
</tr>
<tr>
<td><strong>USB</strong></td>
<td>1x USB 3.1 Gen 2 w/ OTG capability (Type C) 1x USB 2.0 (Type A)</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>+9V to +36V Input Voltage Range</td>
</tr>
<tr>
<td><strong>Misc. Interfaces</strong></td>
<td>3x 3.3V TTL UARTs (1x CONSOLE) 8 GPIOs 3.3V TTL (2x PWM Capable) 2x I2C 3.3V, 1x CAN 2.0b, 2x SPI, 2x 3.3V, 2x 5V, 8x GND</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>-40°C to +85°C (-40°F to +185°F)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>80g (2.82oz)</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>90mm x 75mm (3.54” x 2.95”)</td>
</tr>
</tbody>
</table>

### Boson For Orin

Boson integrates up to four MIPI cameras within an extremely small footprint. Boson maximizes sensor inputs and storage solutions for high-end vision applications.

- Compatible with the NVIDIA® Jetson Orin™ NX, and Orin™ Nano
- Integrate up to 4x 2-lane or 2x 4-lane MIPI FRAMOS Sensor Modules
- Dual Gigabit Ethernet and Dual USB
- NVMe for additional storage

### Boson-22

A small, but powerful vision-focused board for Jetson Orin NX. Packed with 4x 22-Pin MIPI camera inputs, dual Gigabit Ethernet, USB C, and USB 3.0, all in a rugged and compact package.

- 2x 4-lane MIPI Modules, or 4x 2-lane MIPI Modules, or 2x 4-lane and 2x 2-lane MIPI Modules
- Dual Gigabit Ethernet, USB C, USB3.0
- NVMe for additional storage; WiFi and Bluetooth expansion options
- +9V to +36V wide input voltage range
**Orin™ NX Inference Server**

The Jetson Orin™ NX Inference Server is a low wattage, high-performance deep learning inference server powered by the NVIDIA® Jetson Orin™ NX 16GB module.

- 24x 100 TOPS, 1024 GPU CUDA cores with NVIDIA® Ampere™ architecture
- 4x 10G SFP+ uplink capability
- 0°C to +50°C Operating Temperature Range

**Polaris**

Harnessing the Jetson Orin™ NX and built for robotics, smart city and autonomous machines, the rugged Polaris system provides a wide range of I/O in an IP67 rated rugged package.

- IP67 Rated, Actively or Passively Cooled
- Rugged M12: 2x GbE, 2x CAN, GPIO, Wide range isolated power input (+18V to +68V)
- 2x USB3.1, 4x GMSL2 via sealed FAKRA, 4G/5G/LTE, WiFi/BT, GNSS, M.2 2280 NVME M-Key

**Rudi-NX**

Rudi-NX is the ultimate Edge AI computing device for state-of-the-art, compute-intensive applications. Rudi-NX is powered by NVIDIA® Jetson Orin™ NX.

- Extremely small footprint: 135mm x 50mm x 109mm
- I/O: 4x GMSL, USB 3.0, USB 2.0, CAN 2.0b, USB OTG, RS-485, I2C, GPIO, SPI, PWM
- 1x NVMe (PCIe x4, 2280)
- -20°C to +80°C Operating Temperature Range

**Rudi-NX FPD-Link III**

Rudi-NX FPD-Link III serves as the ultimate computing solution for cutting-edge, compute-intensive applications at the edge, and features 4x FPD-Link III cameras.

- Extremely small footprint: 135mm x 50mm x 109mm
- I/O: 4x FPD-Link III, USB3.0, USB 2.0, CAN 2.0b, USB OTG, RS-485, I2C, GPIO, SPI, PWM
- 1x NVMe (PCIe x4, 2280)
- -20°C to +80°C Operating Temperature Range
# NVIDIA® JETSON™ PRODUCT LIFECYCLE

<table>
<thead>
<tr>
<th>Jetson Module</th>
<th>Available Through</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jetson AGX Orin 64GB</td>
<td>January 2030</td>
</tr>
<tr>
<td>Jetson AGX Orin 32GB</td>
<td>January 2030</td>
</tr>
<tr>
<td>Jetson AGX Orin Industrial</td>
<td>July 2033</td>
</tr>
<tr>
<td>Jetson Orin NX 16GB</td>
<td>January 2030</td>
</tr>
<tr>
<td>Jetson Orin NX 8GB</td>
<td>January 2030</td>
</tr>
<tr>
<td>Jetson Orin Nano 8GB</td>
<td>January 2030</td>
</tr>
<tr>
<td>Jetson Orin Nano 4GB</td>
<td>January 2030</td>
</tr>
<tr>
<td>Jetson AGX Xavier 64GB</td>
<td>January 2025</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Jetson Module</th>
<th>Available Through</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jetson AGX Xavier (32GB)</td>
<td>January 2028</td>
</tr>
<tr>
<td>Jetson AGX Xavier Industrial</td>
<td>July 2031</td>
</tr>
<tr>
<td>Jetson Xavier NX 16GB</td>
<td>January 2026</td>
</tr>
<tr>
<td>Jetson Xavier NX (8GB)</td>
<td>January 2028</td>
</tr>
<tr>
<td>Jetson TX2 NX</td>
<td>February 2028</td>
</tr>
<tr>
<td>Jetson TX2</td>
<td>January 2025</td>
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<tr>
<td>Jetson TX2i</td>
<td>April 2028</td>
</tr>
<tr>
<td>Jetson Nano</td>
<td>January 2027</td>
</tr>
</tbody>
</table>

**Product Change Notifications**

Hardware component changes with possible corresponding software changes may occur during the product lifecycle (e.g. memory component updates). Scan the QR Code below to stay up-to-date with Connect Tech Product Change Notifications.

**End of Life Notifications**

Official End of Life notice will be sent a minimum of 8 months prior to the last shipment. Check EOL Notifications by scanning the QR code below.
### JETSON ORIN COMPARISON CHART

<table>
<thead>
<tr>
<th></th>
<th>Orin Nano 4GB</th>
<th>Orin Nano 8GB</th>
<th>Orin NX 8GB</th>
<th>Orin NX 16GB</th>
<th>AGX Orin 32GB</th>
<th>AGX Orin 64GB</th>
<th>AGX Orin Industrial</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AI Performance</strong></td>
<td>20 TOPS</td>
<td>40 TOPS</td>
<td>70 TOPS</td>
<td>100 TOPS</td>
<td>200 TOPS</td>
<td>275 TOPS</td>
<td>248 TOPS</td>
</tr>
<tr>
<td><strong>GPU</strong></td>
<td>512-core NVIDIA Ampere w/ 16 Tensor Cores</td>
<td>1024-core NVIDIA Ampere w/ 32 Tensor Cores</td>
<td>1792-core NVIDIA Ampere w/ 56 Tensor Cores</td>
<td>2048-core NVIDIA Ampere w/ 64 Tensor Cores</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CPU</strong></td>
<td>6-core Arm® Cortex®-A78AE v8.2 64-bit CPU</td>
<td>6-core Arm® Cortex®-A78AE v8.2 64-bit CPU</td>
<td>8-core Arm® Cortex®-A78AE v8.2 64-bit CPU</td>
<td>8-core Arm® Cortex®-A78AE v8.2 64-bit CPU</td>
<td>12-core Arm® Cortex®-A78AE v8.2 64-bit CPU</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td>4GB 64-bit LPDDR5 34 GB/s</td>
<td>8GB 128-bit LPDDR5 68 GB/s</td>
<td>8GB 128-bit LPDDR5 102.4GB/s</td>
<td>16GB 128-bit LPDDR5 102.4GB/s</td>
<td>32GB 256-bit LPDDR5 204.8 GB/s</td>
<td>64GB 256-bit LPDDR5 (+ECC) 204.8 GB/s</td>
<td></td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>Supports External NVMe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>64GB eMMC 5.1</td>
</tr>
<tr>
<td><strong>PCIe</strong></td>
<td>1 x 4 + 3 x 1 PCIe Gen3</td>
<td>3 x 1 + 1 x 4 PCIe Gen4</td>
<td>Up to 2 x8, 1 x4, 2 x1 PCIe Gen4</td>
<td>Up to 2 x8, 1 x4, 2 x1 PCIe Gen4, Root Port &amp; Endpoint</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CSI Camera</strong></td>
<td>Up to 4 cameras (8 via virtual channels)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Up to 4 cameras (16 via virtual channels)</td>
</tr>
<tr>
<td><strong>DL Accelerator</strong></td>
<td>---</td>
<td>1x NVDLA v2.0</td>
<td></td>
<td>2x NVDLA v2.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Vision Accelerator</strong></td>
<td>---</td>
<td></td>
<td>1x PVA v2.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Networking</strong></td>
<td>1x GbE</td>
<td>1x GbE</td>
<td>1x GbE</td>
<td>1x GbE</td>
<td>1x GbE</td>
<td>2x 10GbE</td>
<td></td>
</tr>
<tr>
<td><strong>Mechanical</strong></td>
<td>69.6mm x 45mm</td>
<td>260-pin SO-DIMM connector</td>
<td></td>
<td></td>
<td>100 mm x 87 mm, 699-pin Molex Mirror Mezz Connector</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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www.connecttech.com
Rogue is a full featured Carrier Board for the NVIDIA® Jetson AGX Xavier™ module. Camera Board platforms are available for the Rogue Carrier.

- 6x 2-lane or 4x 4-lane MIPI CSI Camera Inputs
- 2x NVMe M.2 Key M Slots, 3x USB 3.1, 2x GbE
- Wide input power range 9-19V DC
- Dimensions: 92mm x 105mm

Rogue-X allows for the Jetson AGX Xavier™ to interface up to two XIMEA xiX embedded vision cameras, each camera utilizing a PCIe Gen2 x4 connection.

- 6x 2-lane or 4x 4-lane MIPI CSI Camera Inputs
- 1x NVMe M.2 Key M Slot, 3x USB 3.1, 2x GbE
- Wide input power range 9-19V DC
- Dimensions: 105mm x 105mm

Rogue-X2 is a full featured Carrier Board for the NVIDIA Jetson AGX Xavier™ module, allowing for a PCIe x4 peripheral card to be used for I/O expansion.

- PCIe x4 Card Slot
- 6x 2-lane or 4x 4-lane MIPI CSI-2 Camera Inputs
- 1x NVMe M.2 Key M Slot, 3x USB 3.1, 2x GbE
- Wide input power range 9-19V DC
- Dimensions: 119.5mm x 105mm

Expand your Rogue-X with 2 - 2230, 2242, 2260 or 2280 NVMe PCI x4 modules.

Features:
- PCIe Gen3 x4 interface
- 1x NVMe M.2 Key M Slot
- Direct 12V power from an AGX103 or 2.1 external positive barrel jack
- 107.95 x 63.5 mm
## CARRIER BOARD COMPARISON CHART

<table>
<thead>
<tr>
<th></th>
<th>Rogue Carrier</th>
<th>Rogue-X Carrier</th>
<th>Rogue-X2 Carrier</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part Number</strong></td>
<td>AGX101</td>
<td>AGX103</td>
<td>AGX108</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>92mm x 105mm (3.62” x 4.13”)</td>
<td>105mm x 105mm (4.13” x 4.13”)</td>
<td>119.5mm x 105mm (4.70” x 4.13”)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>103g (3.63oz)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Camera Inputs</strong></td>
<td>6 x2 Lane MIPI CSI-2 OR 4 x4 Lane MIPI CSI-2</td>
<td>2x PCIe Gen2 x4 Connections (for ximea xIX cameras) 6x 2 Lane MIPI CSI-2 or 4x 4 Lane MIPI CSI-2</td>
<td>6x 2 lane MIPI CSI-2 OR 4x 4 lane MIPI CSI-2</td>
</tr>
<tr>
<td><strong>User Expansion</strong></td>
<td>1x M.2 Key-E Slot with PCIe &amp; USB (WiFi + BT modules)</td>
<td>2x PCIe Gen2 x4 1x M.2 Key-E Slot with PCIe &amp; USB (WiFi + BT modules)</td>
<td>1x M.2 Key-E expansion slot (WiFi + BT modules) 1x PCIe x8 Edge Card Connector</td>
</tr>
<tr>
<td><strong>USB</strong></td>
<td></td>
<td>3x USB 3.1, 1x USB OTG</td>
<td></td>
</tr>
<tr>
<td><strong>Networking</strong></td>
<td></td>
<td>2x Gigabit Ethernet</td>
<td></td>
</tr>
<tr>
<td><strong>Display Output</strong></td>
<td></td>
<td>2x HDMI 2.0</td>
<td></td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>1x Micro SD/UFS Card Slot</td>
<td>1x Micro SD/UFS Card Slot</td>
<td>1x NVMe M.2 Key M Slots</td>
</tr>
<tr>
<td><strong>UART</strong></td>
<td>2x @ 3.3V levels UART0 and UART1</td>
<td></td>
<td>2x 3.3V Logic Level UARTs</td>
</tr>
<tr>
<td><strong>I2C/SPI</strong></td>
<td></td>
<td>1x I2C Channel @ 3.3V IO</td>
<td></td>
</tr>
<tr>
<td><strong>CAN</strong></td>
<td></td>
<td>2x CAN 2.0b Port</td>
<td></td>
</tr>
<tr>
<td><strong>GPIO</strong></td>
<td></td>
<td>4 bits of 3.3V (level shifted GPIO)</td>
<td></td>
</tr>
<tr>
<td><strong>Input Power</strong></td>
<td></td>
<td>9-19V DC Wide Input Power (4 pin Mini-fit Jr Connector)</td>
<td>14-19V required for full camera support with GPU under load</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td></td>
<td>-40°C to +85°C (-40°F to +185°F)</td>
<td></td>
</tr>
</tbody>
</table>
Jetson Xavier™ NX, and Jetson™ Nano

**EMBEDDED SYSTEMS**

<table>
<thead>
<tr>
<th>Rudi-NX</th>
<th>Boson for FRAMOS</th>
<th>Photon AI Camera Platform</th>
<th>Quark</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESG602</td>
<td>NGX007</td>
<td>NGX002/NGX003</td>
<td>NGX004</td>
</tr>
</tbody>
</table>

**Rudi-NX**
Rudi-NX is the ultimate Edge AI computing device for state-of-the-art, compute-intensive applications. Rudi-NX is powered by NVIDIA® Jetson Xavier™ NX.
- Extremely small footprint: 135mm x 50mm x 109mm
- I/O: 4x GMSL, USB 3.0, USB 2.0, CAN 2.0b, USB OTG, RS-485, I2C, GPIO, SPI, PWM
- 1x NVMe (PCIe x4, 2280), 1x SD Card
- -20°C to +80°C Operating Temperature Range

**Boson for FRAMOS**
Boson for FRAMOS is an AI vision powerhouse, integrating up to four MIPI cameras within an extremely small footprint.
- Compatible with Xavier NX, TX2 NX & Nano
- Integrate up to 4x 2-lane or 3x 4-lane MIPI FRAMOS Sensor Modules
- Dual GbE and Dual USB
- NVMe and microSD card for additional storage
- WiFi and Bluetooth expansion options
- +9V to +36V wide input voltage range

**Photon AI Camera Platform**
The Photon carrier board is a Jetson AI Camera Platform specifically designed to support smart camera applications.
- Compatible with Orin NX, Orin Nano, Xavier NX/TX2 NX & Nano
- PoE PD (NGX002) capable, power via separate input or over Ethernet
- 1 x GbE, 1x NVMe (M.2 M-Key), 1 microSD, 4x GPIO, I2C, USB Console UART, USB OTG for programming
- DC barrel power input also available
- For Jetson Xavier NX, TX2 NX & Nano only

**Quark**
Quark Carrier is an affordable, ultra small feature rich carrier. Just slightly larger than the Jetson™ module, it’s ideal for vision applications, inference, and unmanned payloads.
- Tiny footprint: 82.6mm x 58.8mm (3.25” x 2.31”)
- 1x USB 3.1, 2x GbE, 2x 2-lane MIPI CSI-2, 1x USB OTG
- 1x SD card slot, 3x 3.3V UART, 2 x I2C, 1x CAN 2.0b, and 1x SPI
- For Jetson Xavier NX, TX2 NX & Nano only
# Jetson Xavier™ NX, and Jetson™ Nano

<table>
<thead>
<tr>
<th>Name</th>
<th>Hadron Carrier</th>
<th>Quark Carrier</th>
<th>Photon Carrier</th>
<th>Boson Carrier for FRAMOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part Number</td>
<td>NGX012</td>
<td>NGX004</td>
<td>NGX002/NGX003</td>
<td>NGX007</td>
</tr>
<tr>
<td>Dimensions</td>
<td>82.6mm x 58.8mm (3.25” x 2.31”)</td>
<td>82.6mm x 58.8mm (3.25” x 2.31”)</td>
<td>145mm x 64.5mm (5.7” x 2.53”)</td>
<td>90mm x 75mm (3.54” x 2.95”)</td>
</tr>
<tr>
<td>Ethernet</td>
<td>1x 1000BASE-T Ports  • 1x GBE from Jetson GBE Port</td>
<td>2x 1000BASE-T Ports  • 1x GBE from Jetson GBE Port  • 1x GBE from PCIe x1 i210 PHY</td>
<td>1x 1000BASE-T Uplink  • PoE IEEE 802.3af-2003 (15.4W) PD  • PoE+ IEEE 802.3at-2009 (25.5W) PD</td>
<td>2x 1000BASE-T Ethernet Ports  • 1 Port sourced directly from NX  • 1 Port sourced from i210</td>
</tr>
<tr>
<td>USB + OTG</td>
<td>2x USB 3.1 1x USB 2.0 (OTG)</td>
<td>1x USB 3.1</td>
<td>1x USB 3.1, 1x USB 2.0 OTG 1x USB FTDI UART</td>
<td>1x USB 3.0 Gen 2 w/ OTG capability (Type C) 1x USB 2.0 (Type A)</td>
</tr>
<tr>
<td>MIPI Cameras</td>
<td>1x 4-lane MIPI CSI-2 22-pin FPC Connector</td>
<td>2x 2-lane MIPI CSI-2</td>
<td>2x 2-lane MIPI CSI-2</td>
<td>Up to:  • 4x 2-lane MIPI FRAMOS Sensor Modules, or  • 3x 4-lane FRAMOS Sensor Modules</td>
</tr>
<tr>
<td>Misc Interfaces</td>
<td>1x 3.3VTTL UART, 2x RS-232 Serial Ports, 4x PWM capable GPIO 1x 3.3V I2C, 1x 3.3V SPI</td>
<td>3x UARTs, 8x GPIO, 2x I2C 3.3V, 1x CAN 2.0b, 1x SPI</td>
<td>1x I2C, 4x GPIO, 1x Power Output</td>
<td>3x 3.3V TTL UARTs (1x CONSOLE), 8 GPIOs 3.3V TTL (2x PWM Capable), 2x I2C 3.3V, 1x CAN 2.0b, 2x SPI, 2x 3.3V, 2x 5V, 8x GND</td>
</tr>
<tr>
<td>Storage</td>
<td>1x 2242/2230 NVMe (M-Key)</td>
<td>1x Micro SD Card Slot</td>
<td>1x SD Card Slot 1x NVMe 2280 (M.2 M-KEY)</td>
<td>1x M.2 M-Key (2280) NVMe PCIe x4 1x Micro SD Card</td>
</tr>
<tr>
<td>Display Output</td>
<td>None (Headless Operation only)</td>
<td>None (Headless Operation only)</td>
<td>1x HDMI 2.0</td>
<td></td>
</tr>
<tr>
<td>Wireless Expansion</td>
<td>1x 2230 E-Key Expansion for WiFi/Bluetooth</td>
<td>N/A</td>
<td>1x 2230 E-Key Expansion for WiFi/Bluetooth 1x 2230 B-Key Expansion for LTE/GNSS</td>
<td>1x 2230 E-Key Expansion for WiFi/Bluetooth 1x PCIe x1 + USB 2.0</td>
</tr>
<tr>
<td>Power Input</td>
<td>+9V to +60V DC</td>
<td>+5V DC Input (Positive Locking MiniTek Connector)</td>
<td>1x 2mm DC Barrel Jack +12V DC +/- 5%</td>
<td>+9V to +36V Input Voltage Range Auto-ON operation by default</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-25°C to +85°C (-13°F to +185°F)</td>
<td>-25°C to +85°C (-13°F to +185°F)</td>
<td>-25°C to +85°C (-13°F to +185°F)</td>
<td>-40°C to +85°C (-40°F to +185°F)</td>
</tr>
<tr>
<td>Weight</td>
<td>33g (1.16oz)</td>
<td>33g (1.16oz)</td>
<td>76g (2.68oz)</td>
<td>80g (2.82oz)</td>
</tr>
</tbody>
</table>

Hadron, Photon and Boson are compatible with Jetson Orin™ NX, Xavier™ NX, TX2™ NX, Orin™ Nano and Nano™. While Quark is only compatible with Jetson Nano™, TX2™ NX, and Xavier™ NX SoMs, some I/O availability will change across modules.
Jetson™ Thermal Solutions & Accessories

THERMAL SOLUTIONS

ACTIVE HEAT SINKS

Jetson Orin NX/Nano
XHG325

Jetson Xavier NX & Nano
XHG312, XHG314, XHG309

Jetson TX2-NX
XHG318

PASSIVE HEAT SINKS

Jetson Orin NX/Nano
XHG324

Jetson Xavier NX & Nano
XHG311, XHG308

Jetson TX2 NX - XHG317

THERMAL PLATES

Jetson Orin NX/Nano
XHG323

Jetson Xavier NX & Nano
XHG313, XHG310

Jetson TX2 NX - XHG316

Jetson Accessories: Connect Tech carrier boards and system level solutions offer a wide variety of expansion options and accessories.

Accessories include: Cables, antennas, power supplies, camera adapters, camera expansions, enclosures, thermals, WiFi modules, 5G & LTE Modules, frame grabbers, storage, bluetooth modules, and more.
Jetson™ Thermal Solutions & Accessories

ACCESSORIES

**Active Heat Sink**
This active heat sink features a built-in fan for enhanced cooling, ensuring optimal performance and longevity of your NVIDIA® Jetson™ AGX module.

- Specifically designed to fit the NVIDIA® AGX Orin™. Also compatible with Jetson AGX Xavier™ modules
- Dissipates the heat produced by the module through a fan
- Dimensions: 100mm x 87mm x 54.5mm

**Passive Heat Sink**
Efficiently dissipates heat from your NVIDIA® Jetson AGX Orin™ and AGX Xavier™ modules, ensuring optimal performance and longevity.

- Specifically designed to fit the NVIDIA® AGX Orin. Also compatible with Jetson AGX Xavier™ modules
- Dissipates the heat produced by the module through convection
- Dimensions: 100mm x 87mm x 33.5mm

**Liquid Cooling Block**
Superior thermal management, keeping your NVIDIA® Jetson™ AGX module cool under heavy loads for maximum performance.

- Industrial grade Liquid Cooling solution
- Ideal for space constrained or limited airflow applications
- 8 customizable side ports where inlet/outlet flow can be directed
- Incredibly quiet, high-performance heat dissipation solution

**Connector Saver**
The NVIDIA® Jetson AGX Xavier™ and AGX Orin™ Connector Saver attaches directly to the AGX production module to save your connector from wear.

- Minimizes contact damage
- Protects connectors from mating and unmating wear
- Dimensions: 92mm x 105mm (3.62” x 4.13”)
- Compatibility: NVIDIA Jetson AGX Xavier™, Jetson AGX Orin™, Connect Tech Forge, and Rogue Carriers

XHG319  XHG320  XHG307  ADG110
Connect Tech is a leader in high-end compute platforms for the embedded market. Choose from the latest NVIDIA GPUs paired with Xeon D (Server Class) and Intel Atom C3000 x86 processors in a compact system designed to be highly portable. Available in a fully enclosed system as well as a non-enclosed version for customer designed thermal solutions.

COM Express Type 6 + GPU Embedded System

The COM Express® Type 6 + GPU Embedded System combines High-End NVIDIA GPUs with latest generation x86 processors into a ruggedized small form factor embedded system.

- GPUs can be targeted for independent display outputs OR for a headless GPU processing system utilizing CUDA® cores
- CPU: Intel Raptor Lake (13th Gen), Alder Lake (12th Gen) and Tiger Lake (11th Gen) options available
- GPU: NVIDIA RTX A4500, A2000, A1000 & A500 (Ampere) & RTX 5000, RTX 3000 and T1000 (Turing) Options Available

VXG SERIES

COM Express Type 7 + GPU Embedded System

The COM Express Type 7 + GPU Embedded System combines 2x 10 GbE with Intel Xeon® D (Server Class) processors with high-end NVIDIA GPUs all into a small form factor embedded system.

- GPUs can be targeted for independent display outputs OR for a headless GPGPU processing system using CUDA® cores
- CPU: Intel Ice Lake D, Broadwell D and Denverton Server Class Options Available
- GPU: NVIDIA RTX A4500, A2000, A1000 & A500 (Ampere) & RTX 5000, RTX 3000 and T1000 (Turing) Options Available

V7G SERIES

V7G GPU System

The V7G GPU System combines Intel Xeon D (Server Class) and Intel Atom C3000 x86 processors with high-end NVIDIA Quadro GPUs in a black aluminum enclosure. Half-rack rail mount or Standalone mounting brackets available.

- Ideal for high-end encode/decode video applications or GPGPU CUDA processing, Deep Learning and AI applications.
- CPU: Intel Ice Lake D, Broadwell D and Denverton Server Class Options Available
- GPU: NVIDIA RTX A4500, A2000, A1000 & A500 (Ampere) & RTX 5000, RTX 3000 and T1000 (Turing) Options Available

ESG7 SERIES
### AGX Orin

**Graphite VPX/AGX ORIN**

GraphiteVPX/AGX Orin is a 3U peripheral card that brings the NVIDIA® Jetson AGX Orin™ to the highly rugged embedded VPX marketplace. The GraphiteVPX/AGX Orin features USB 3.2, DisplayPort, and an internal NVMe.

- **3U VPX SOSA Aligned**
- NVIDIA® Jetson AGX Orin™ Industrial
- PCIe x8 Gen4 (Endpoint or Host)
- 2x 10GBASE-KR Ethernet
- Complete IMPI Support
- Industrial NVMe 1TB/2TB
- USB 3.2, DisplayPort, 10BASE-T, GPIO, UART, Debug, OTG Flashing via front panel

**VPG004**

### GPU

**Graphite VPX/GPU**

GraphiteVPX/GPU is a VITA 65 compliant 3U peripheral card that brings the NVIDIA® RTX A2000 and RTX A1000 GPUs to the highly rugged embedded VPX marketplace. The GraphiteVPX/GPU provides up to four DisplayPort outputs or 2 DVI outputs.

- **GPU Options:**
  - NVIDIA RTX A2000
  - NVIDIA RTX A1000
  - 3U VPX SOSA Aligned
  - VITA 46, 48, and 65 compliant
  - PCIe 3.0 (x8 or two x4) Data plane only

### 10GbE

**Graphite VPX/10GBE**

Excellent for demanding applications with rugged environments and extreme temperatures, the GraphiteVPX/10GbE Managed Ethernet Switch is also a highly reliable way to communicate with 10GbE in an embedded system.

- **3U VPX SOSA Aligned 10G/2.5G/1G Ethernet Switch**
- 12x 10G SERDES Ports
- 10GBASE-KR/5GBASE KR/2.5GBASE-KX/1000BASE-KX
- 24x 2.5G/1G Copper Ports 2.5GBASE-T/1000BASE-T
- Fully-managed L2 and L3 multi-layer switching services
- -40°C to +85°C (-40°F to +185°F)
COM Express Carrier Boards

COM-HPC® Carrier Board

Our first Carrier Board for the new COM-HPC® platform. This carrier board features high-speed PC style connectors and locking pin header connectors.

- 2 x 2.5-Gigabit Ethernet
- 3 x USB4 via USB type C
- 1 x 3042 M.2 B-Key, 1 x 2230 M.2 E-Key, 1 x 16-Lane PCIe Expansion
- Dimensions: 160mm x 120mm
- Extended Temperature Range -40°C to +85°C

HPC001

Type 7 Carrier Board

This Type 7 Carrier Board is ideal for high-compute, enterprise level applications needing access to high-end Intel® Xeon® D class and Intel® Atom® C3000 processors.

- Dual 10-Gigabit Ethernet
- Ultra High Speed Storage with M.2 NVMe SSD support
- Extremely Small Form Factor: 125mm x 95mm
- Extended Temperature Range -40°C to +85°C

CCG070

Type 10 Mini Carrier Board

The Type 10 Mini Carrier Board is an extremely small carrier board featuring rugged, locking connectors and offers the ultimate in durability.

- Extremely small size: 84mm x 55mm
- CCG010 supports USB2.0, CCG020 supports USB3.0
- 2 x mini PCIe, mSATA, SATA, 2 x GBE, 6 x USB, LVDS, DisplayPort HDMI/DVI/VGA, HD Audio, 2x RS232/422/485

CCG010/CCG020

COMING SOON:

- High-end PICMG standard for credit card-sized COMs
- Up to 76 Watts of headroom for performance CPUs
- Soldered memory provides high resistance against shock and vibrations
COM Express Carrier Boards

**TYPE 6**

**Type 6 104e**
This is a compact carrier board which matches the dimensions of a COM Express® Basic module and offers the ultimate durability with rugged, locking pin header connectors.

- 4x USB 3.0, 2x GbE, 2x RS-232/485, LVDS (2x24), VGA
- PCIe/104 Type 1 (CCG018) or PCIe/104 Type 2 (CCG017)
- On-Board DisplayPort/HDMI/DVI display switching
- Extended temperature range -40°C to +85°C

**CCG017/CCG018**

**Type 6 Rugged Ultra Lite Carrier Board**
The Type 6 Rugged Ultra Lite Carrier Board is compact. It offers the ultimate durability with locking, rugged pin headers. CCG011 supports only USB 2.0 and CCG012 supports USB 3.0.

- Mini-PCIe Expansion, USB 2.0, DisplayPort++
- Small size, 95mm x 125mm
- Supports latest Intel® processor sets
- Extended temperature range -40°C to +85°C

**CCG011/CCG012**

**Type 6 Ultra Lite Carrier Board**
The Type 6 Ultra Lite Carrier Board is a compact carrier board with standard PC connectors and is ideal for space constrained applications.

- COM Express® Type 6 Compatibility
- Mini-PCIe Expansion
- Supports latest Intel® processor sets
- Extended temperature range -40°C to +85°C

**CCG008**

**SMARC**

**Type 6 Rugged Ultra**

**SMARC 2.0 Carrier**
Connect Tech’s SMARC 2.0 carrier is an extremely small SMARC carrier board ideal for low power IoT applications. Users can take advantage of the integrated on-board wireless capabilities.

- Feature Packed (HDMI, SATA, 2x MIPI CSI-2 Camera Interfaces)
- 2x USB 3.0, 2x USB 2.0, 2x USB 2.0 to miniPCIe
- Input Voltage +5V DC only
- Extended temperature range -40°C to +85°C

**SRG004**
Embedded Ethernet Devices

10GbE

Xtreme/10G Managed Ethernet Switch /Router

Xtreme/10G Managed Ethernet Switch/Router provides high density, high port count Layer 2 switching and Layer 3 routing with 10G uplinks. A total of 36 switchable ports, with 12x 10G/5G/2.5G and 24x 2.5G/1GbE copper ports in an extremely small form factor 85mm x 85mm (3.35” x 3.35”).

XDG205 features 1588 PTP support!

- Drop-in replacement to previous generation module (XDG201/XDG202)
- 36 switchable ports (12x10G/5G/2.5G; 24x 2.5G/1GbE)
- High-density board-to-board connector
- +4V to 14V input range
- Measurements: 85mm x 85mm (3.35” x 3.35”)
- Extended Temperature Range -40°C to +85°C (-40°F to +185°F)

Software Packages for Managed Ethernet Switches

Connect Tech’s software design team builds support for our line of managed ethernet switches using industry-leading firmware.

IXtaX

Breakout Board

Xtreme/10G Managed Ethernet Switch /Router Embedded Carrier

- PPS_IN and PPS_OUT IO support.
- Improved RJ-45 magnetics: supporting 24x 2.5G/1G Copper Ports
- 8x 10G SFP+ ports (compared to 4x 10G and 4x 1G on XBG301)
- Legacy support for XDG201
- Improved USB and Serial Connectors
- Improved 3.3V Power Supply to support higher power demand

CONNECTTECH.COM/SUPPORT

We’re proud to offer a convenient way for our customers to stay up-to-date with the latest BSP software updates. Our web page allows users to subscribe to updates for their purchased hardware, ensuring that they have access to the latest features and improvements. We’ve made it easy for our customers to receive them directly through their inbox.
Embedded Ethernet Devices

1GbE

Xtreme/GbE 24-Port Managed Carrier Ethernet Switch

Xtreme/GbE 24-Port Managed Carrier Ethernet Switch provides high density, high port count, Carrier Grade Ethernet switching capabilities in an extremely small embedded form factor. Excellent for any space constrained, mission-critical application needing an embedded high-density/high-port count managed Ethernet Switch.

- 24 Port Gigabit Ethernet (10/100/1000 Mbps) Switch
- All 24 Port Magnetics Integrated on-board
- High-Density Ruggedized Board-to-Board/Board-to-Cable Port Breakout
- Extremely Small Footprint 90 × 66 mm (3.550 × 3.775 inches)
- Conduction cooled Heatplate or Air cooled Heatsink Options
- Extended Temperature Range -40°C to +85°C

The XDG025 is designed for standalone applications, with all thermal extraction on one layer and connector/cabling on the opposite layer. Whereas the XDG024 is intended to stack directly into a PCIe/104 stack.

XDG024/XDG025

LINQ/GbE

LINQ/GbE is a Rugged Managed Ethernet Switch Box. LINQ/GbE series of products offers 12 or 24 Ethernet ports of 10/100/1000 Mbps.

- 12 and 24 Port 10/100/1000 Mbps Managed Switch Box
- Ruggedized Sealed RJ-45 Acclimate Connector Series
- IP68 Dust and Waterproof Solid Aluminum Enclosure
- Layer 2+ Carrier Ethernet Management
- Low Power Passively Cooled Construction

Xtreme/GbE Managed Carrier Ethernet Switches

This 8 or 12 port Ethernet Switch is available with either standard RJ45 or rugged latching connectors, conduction cooled heatplates, and PC/104, PCIe/104 or standalone options.

- Conduction cooled Heatplate or Air cooled
- 8 or 12 Port 10/100/1000 Mbps Switch
- Carrier Grade Ethernet Switching
- Available with RJ-45 or Rugged Locking connectors
- PC/104 Compliant: 4.550" x 4.393” (115.57mm x 111.58mm)
- Extended Temperature Range -40°C to +85°C (-40°F to +185°F)

XDG024/XDG025

ESG301/ESG302

Xtreme/GbE 24-Port Managed Carrier Ethernet Switch provides high density, high port count, Carrier Grade Ethernet switching capabilities in an extremely small embedded form factor. Excellent for any space constrained, mission-critical application needing an embedded high-density/high-port count managed Ethernet Switch.

- 24 Port Gigabit Ethernet (10/100/1000 Mbps) Switch
- All 24 Port Magnetics Integrated on-board
- High-Density Ruggedized Board-to-Board/Board-to-Cable Port Breakout
- Extremely Small Footprint 90 × 96 mm (3.550 × 3.775 inches)
- Conduction cooled Heatplate or Air cooled Heatsink Options
- Extended Temperature Range -40°C to +85°C

The XDG025 is designed for standalone applications, with all thermal extraction on one layer and connector/cabling on the opposite layer. Whereas the XDG024 is intended to stack directly into a PCIe/104 stack.

XDG024/XDG025

LINQ/GbE

LINQ/GbE is a Rugged Managed Ethernet Switch Box. LINQ/GbE series of products offers 12 or 24 Ethernet ports of 10/100/1000 Mbps.

- 12 and 24 Port 10/100/1000 Mbps Managed Switch Box
- Ruggedized Sealed RJ-45 Acclimate Connector Series
- IP68 Dust and Waterproof Solid Aluminum Enclosure
- Layer 2+ Carrier Ethernet Management
- Low Power Passively Cooled Construction

Xtreme/GbE Managed Carrier Ethernet Switches

This 8 or 12 port Ethernet Switch is available with either standard RJ45 or rugged latching connectors, conduction cooled heatplates, and PC/104, PCIe/104 or standalone options.

- Conduction cooled Heatplate or Air cooled
- 8 or 12 Port 10/100/1000 Mbps Switch
- Carrier Grade Ethernet Switching
- Available with RJ-45 or Rugged Locking connectors
- PC/104 Compliant: 4.550" x 4.393” (115.57mm x 111.58mm)
- Extended Temperature Range -40°C to +85°C (-40°F to +185°F)

XDG024/XDG025
Why choose CTI’s engineering services?

- 50% of CTI’s business is customized designs
- Well defined and polished custom design process
- Over 36 years of IP developing a breadth of hardware solutions
- Unprecedented Revision-A success rate
- Guaranteed functional prototypes in as little as 10-12 weeks
Connect Tech Inc. is NVIDIA’s largest global embedded hardware partner offering a wide array of NVIDIA® Jetson™ solutions, as well as embedded products for a variety of industry standards including COM Express, SMARC, and more. With in-house design and manufacturing services, Connect Tech can provide fast turn-around of custom design services, taking you from development to deployment in record time.

In August 2020, Connect Tech was acquired by the US based HEICO Corporation. A successful and growing technology-driven company, HEICO is solidly rooted in the aerospace, industrial, defense and electronics markets.

Connect Tech Inc. - ISO 9001:2015 Certified

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