Connect Tech Inc.
Embedded Computing Experts

NVIDIA
ELITE PARTNER

PRODUCT GUIDE 2022

QUALITY & STANDARDS

- ✓ **ISO 9001:2015 CERTIFIED**

- ✓ **CANADIAN CONTROLLED GOODS**

- ✓ **ITAR CERTIFIED, US JOINT CERTIFICATION**

- ✓ **MIL-STD-810G, DO-160G FOR SHOCK & VIBRATION**

- ✓ **INGRESS PROTECTION**

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ELITE PARTNER
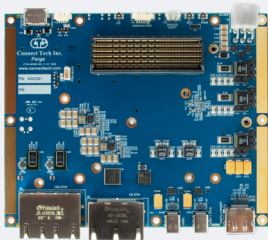
NVIDIA's Largest Global Jetson Hardware Partner

NOTE: Specifications found in this guide are subject to change without notice.

JETSON AGX ORIN

Forge for Orin
AGX201

Forge is Connect Tech's first full featured Carrier Board for the NVIDIA® Jetson AGX Orin™. This carrier board for Jetson AGX Orin™ is specifically designed for commercially deployable platforms.

Features:

- Utilizes Native 2x 10G Ethernet on Orin
- Multiple Expansion through M.2 2x M-Key, 1x B-Key and 1x E-Key
- USB3.2, GbE, External PCIe Cable
- Wide Input Power Range up to +36V

Rogue for Orin
AGX202

Rogue for Orin is a full featured Carrier Board for the NVIDIA® Jetson AGX Orin™. Camera Board platforms are available for the Rogue Carrier.

Features:

- Extremely Small Form Factor (Same Size as Jetson Module)
- Compatible with BOTH AGX Xavier and AGX Orin
- 2x NVMe M.2 Key M Slots, 3x USB 3.1, 2x GbE
- Allows for easy upgrade path from Xavier to Orin

Rudi-AGX for Orin
ESG620

Rudi-AGX Orin unleashes the full potential of the NVIDIA® Jetson AGX Orin™ module, an Industrial Embedded AI system ideal for a range of Edge Computing applications.
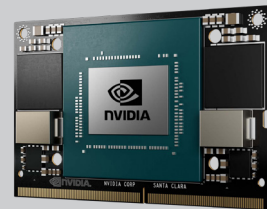
Features:

- Preconfigured with AGX Orin Module
- Utilizes Native 2x 10G Ethernet, as well as USB3.2 and Display Port
- Multiple Expansion through M.2 2x M-Key, 1x B-Key and 1x E-Key
- Active and Passive System Thermals Available

Say hello to Orin.
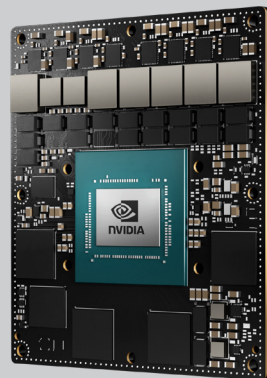
JETSON AGX Orin™ 32GB/64GB

JETSON Orin™ NX 8GB/16GB

	Orin NX 8GB	Orin NX 16GB	Orin AGX 32GB	Orin AGX 64GB
AI Performance	70 TOPS (INT8)	100 TOPS (INT8)	200 TOPS (INT8)	275 TOPS (INT8)
GPU	NVIDIA Ampere Architecture with 1024 Cores and 32 Tensor Cores		NVIDIA Ampere Architecture with 1792 Cores and 56 Tensor Cores	NVIDIA Ampere Architecture with 2048 Cores and 56 Tensor Cores
CPU	6-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 1.5MB L2 + 4MB L3	8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3	8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3	12-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 3MB L2 + 6MB L3
Memory	8GB 128-bit LPDDR5 102.4GB/s	16GB 128-bit LPDDR5 102.4GB/s	32GB 256-bit LPDDR5 204.8 GB/s	64GB 256-bit LPDDR5 204.8 GB/s
Storage	Supports External NVMe		64GB eMMC 5.1	
Power	10W / 15W / 20W	10W / 15W / 25W	15W - 40W	15W - 60W
PCIE	3 x1 + 1 x4 PCIe Gen 4		Up to 2 x8, 1 x4, 2 x1 (PCIe Gen4, Root Port & Endpoint)	
CSI Camera	Up to 4 Cameras (8 via virtual channels) 8 lanes MIPI CSI-2 D-PHY 1.2 (20Gbps)		Up to 6 Cameras (16 via virtual channels) 16 lanes MIPI CSI-2 D-PHY 2.1 (up to 40Gbps)	C-PHY 2.0 (up to 164Gbps)	
DL Accelerator	1x NVDLA v2.0	2x NVDLA v2.0	2x NVDLA v2.0	
Vision Accelerator	PVA v2.0		PVA v2.0	
Networking	1x GbE		1x GbE	4x 10GbE	
Mechanical	69.6 mm x 45 mm, 260-pin SO-DIMM connector		100 mm x 87 mm, 699-pin Molex Mirror Mezz Connector	

THE JETSON FAMILY

JETSON NANO
0.5 TFLOPS (FP16)
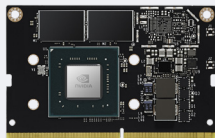
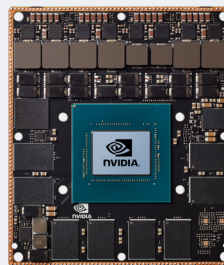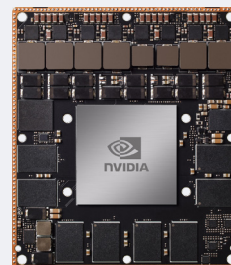**JETSON XAVIER NX 8GB**
6 TFLOPS (FP16)
21 TOPS (INT8)

JETSON TX2i
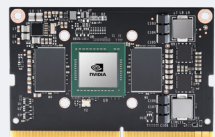1.26 TFLOPS (FP16)
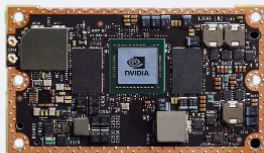
JETSON AGX XAVIER 64GB / 32GB
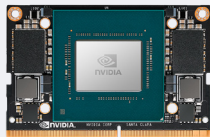11 TFLOPS (FP16)
32 TOPS (INT8)

JETSON AGX XAVIER INDUSTRIAL
10 TFLOPS (FP16)
30 TOPS (INT8)

JETSON TX2 NX
1.3 TFLOPS (FP16)

JETSON XAVIER NX 16GB
6 TFLOPS (FP16)
21 TOPS (INT8)

Entry ————— Mainstream ————————————— Autonomous Machines —————

CONNECT TECH INC.

JETSON MODULE COMPARISON

	Nano	TX2 NX	Xavier NX	TX2i	AGX XAVIER	AGX XAVIER INDUSTRIAL
AI Performance	0.5 TFLOPS	1.33 TFLOPs	6 TFLOPS	1.26 TFLOPs	11 TFLOPS	10 TFLOPS
GPU	128-core NVIDIA Maxwell™ GPU	256-core NVIDIA Pascal™ GPU	384-core NVIDIA Volta™ GPU with 48 Tensor Cores	256-core NVIDIA Pascal™ GPU	512-core NVIDIA Volta™ GPU with 64 Tensor Cores	
CPU	Quad-Core ARM® Cortex®-A57 MPCore	Dual-Core NVIDIA Denver 2 64-Bit CPU and Quad-Core ARM® Cortex®-A57 MPCore	6-core NVIDIA Carmel ARM®v8.2 64-bit CPU 6MB L2 + 4MB L3	Dual-Core NVIDIA Denver 1.5 64-Bit CPU and Quad-Core ARM® Cortex®-A57 MPCore	8-core NVIDIA Carmel Arm®v8.2 64-bit CPU 8MB L2 + 4MB L3	
Memory	4 GB 64-bit LPDDR4 25.6GB/s	4 GB 128-bit LPDDR4 51.2GB/s	8 GB or 16GB 128-bit LPDDR4x 59.7GB/s	8 GB 128-bit LPDDR4 (ECC Support) 51.2GB/s	64GB or 32 GB 256-bit LPDDR4x 136.5GB/s	32GB 256-bit LPDDR4x 136.5GB/s
Storage	16 GB eMMC 5.1			32 GB eMMC 5.1	32 GB eMMC 5.1	64GB eMMC 5.1
Power	5W / 10W	7.5W / 15W	10W / 15W / 20W	10W / 20W	10W / 15W / 30W	20W / 40W
PCIE	1 x4 (PCIe Gen2)	1 x1 + 1 x2, total 30GT/s (PCIe Gen2)	1 x1 + 1 x4 (PCIe Gen3, Root Port & Endpoint)	1 x1 + 1 x4 OR 1 x1 + 1 x1 + 1 x2 (PCIe Gen2)	1 x8 + 1 x4 + 1 x2 + 2 x1 (PCIe Gen4, Root Port & Endpoint)	
CSI Camera	Up to 4 cameras	Up to 5 cameras (12 via virtual channels)	Up to 6 cameras (24 via virtual channels)	Up to 6 cameras (12 via virtual channels)	Up to 6 cameras (24 via virtual channels)	Up to 6 cameras (36 via virtual channels)
DL Accelerator	—	—	2x NVDLA Engines	—	2x NVDLA Engines	
Vision Accelerator	—	—	—	—	7-Way VLIW Vision Processor	2x 7-Way VLIW Vision Processor
Networking	10/100/1000 BASE-T Ethernet					
Mechanical	69.6 mm x 45 mm, 60-pin SO-DIMM connector			87 mm x 50 mm, 400-pin connector	100mm x 87mm, 699-pin connector	

EDGE DEVICES

AGX Inference Server
UAGXAS

The AGX Inference Server is a high performance AI workstation powered by 12x NVIDIA Jetson AGX Xavier modules. Running NVIDIA's most powerful deep-learning software libraries.

Features:

- 12x 11 TFLOPS, 512-core Volta GPU and 64 Tensor Cores
- 2x 10G SFP+, 2x 1G SFP uplink capability
- Up to 2TB of NVMe storage
- 1U ATX style redundant power supply

Sentry-X
SGX001

Sentry-X is ideal for Aerospace, Defense and Heavy Machinery or for any market that can benefit from the Jetson AGX Xavier's incredible performance in a rugged enclosure.

Features:

- 2x GbE, 3x USB 3.1, 2x HDMI, 2x CAN 2.0b, 4x GPI, 4x GPO, 2x RS-232/422/485
- Unique docking stations – allows for quick release of Sentry-X compute module
- Tested to MIL-STD-810G, DO-160G for shock & vibration, ingress protection of IP67

Sentry-X 38999
SGX001-05, SGX001-06 **NEW**

Also Jetson AGX Xavier™ Industrial Compatible!

Sentry-X now offers a fully sealed, 38999 docking sled option using Meritec Hercules rugged, circular MIP-DTL-38999L Series III shell connectors.

Features:

- 2x GbE, 3x USB 3.1, 2x HDMI, 2x CAN 2.0b, 4x GPI, 4x GPO, 2x RS-232/422/485
- Unique docking stations – allows for quick release of Sentry-X compute module
- Tested to MIL-STD-810G, DO-160G for shock & vibration, ingress protection of IP67A

EDGE DEVICES

Rudi-AGX Orin
ESG620 NEW

Rudi-AGX Orin unleashes the full potential of the NVIDIA® Jetson AGX Orin™ module, Rugged Industrial Embedded AI System.

Features:
- Preconfigured with AGX Orin Module
- Utilizes Native 2x 10G Ethernet on Orin, as well as USB3.2 and Display Port
- Multiple Expansion through M.2 2x M-Key, 1x B-Key and 1x E-Key
- Active and Passive System Thermals Available

Rudi-AGX
ESG610

Rudi-AGX unleashes the full potential of the NVIDIA® Jetson AGX Xavier™ module, capable of running AI programs at Maximum Performance (MAX-N).

Features:
- Expandable storage via NVMe and/or SD card
- Connect up to 8x GMSL cameras
- Quickly integrate WiFi, Bluetooth, LTE, and video capture card
- 2x HDMI outputs and 4x USB for robust and flexible deployment

Rudi-AGX-10G
ESG611

Rudi-AGX-10G unleashes the full potential of the NVIDIA Jetson AGX Xavier module, capable of running AI programs at Maximum Performance (MAX-N).

Features:
- Expandable storage via NVMe and/or SD card
- Connect via 10 Gigabit Ethernet
- Quickly integrate WiFi, Bluetooth, LTE, and video capture card
- 2x HDMI outputs and 4x USB for robust and flexible deployment

Rudi-AGX TTP
ESG610/ESG611

Rudi-AGX TTP unleashes the full potential of the NVIDIA® Jetson AGX Xavier™ module, capable of running AI programs at Maximum Performance (MAX-N).

Features:
- Cooled via thermal transfer plate
- Expandable storage via NVMe and/or SD card
- Quickly integrate WiFi, Bluetooth, LTE, and video capture card
- 2x HDMI outputs and 4x USB for robust and flexible deployment

TRUSTED VISION SOLUTIONS

As the capabilities of Edge AI Vision grows, finding solutions to easily integrate sensors with embedded hardware empowers rapid product development and field deployment.

- Partnering with leading camera/sensor providers
- Trusted hardware with integrated sensor software
- Minimize overall application development time

Allied Vision, APPRO.PHO, BASLER, Canon, Boulder AI, CEPTON, D3 Engineering, e-con Systems, FRAMOS, Leopard Imaging, LMI TECHNOLOGIES, MYNTAI, Photoneo, SONY, STEREOLABS, TELEDYNE FLIR, Velodyne LiDAR, XIMEA

CARRIER BOARDS

Rogue
AGX101/AGX111

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

Features:
- Commercially deployable for NVIDIA Jetson AGX Xavier
- 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 (3.62" x 4.13")
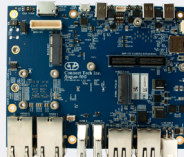
Rogue-X
AGX103/AGX113
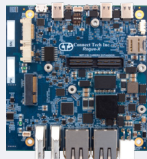
The Rogue-X allows for the Jetson AGX Xavier to interface up to two XIMEA xiX embedded vision cameras, each camera utilizing a PCIe Gen2 x4 connection.

Features:
- 6x 2-lane or 4x 4-lane MIPI CSI Camera Inputs
- 1x NVMe M.2 Key M Slots, 3x USB 3.1, 2x GbE
- Wide input power range 9-19V DC
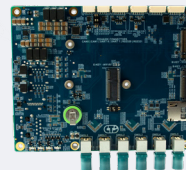- Dimensions: 105mm x 105mm (4.13" x 4.13")

Rogue 10G
AGX105

The Rogue 10G is a full featured Carrier Board for the NVIDIA Jetson AGX Xavier module with 2x 10GBASE-T Ethernet connections.

Features:
- 6x 2-lane or 4x 4-lane MIPI CSI Camera Inputs
- 1x NVMe M.2 Key M Slots, 3x USB 3.1, 2x 10 GbE
- 1x OCuLink external PCIe port
- Dimensions: 135mm x 105mm (5.31" x 4.13")
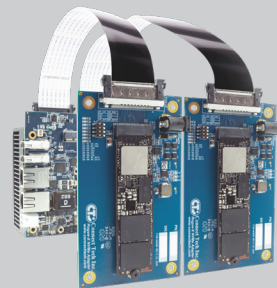
Rogue GMSL
AGX107

The Rogue GMSL is a full featured Carrier Board for the NVIDIA Jetson AGX Xavier module with 6x GMSL2 camera inputs.

Features:
- 6x GMSL2 Camera Inputs
- NVMe M.2 Key M Slot, 2x USB 3.1, 1x GbE
- Wide input power range +11V to +60V DC
- Dimensions: 125mm x 100mm (4.92" x 3.94")

Rogue-X NVMe Adapter
XBG018

Expand your Rogue-X with 2 - 2230, 2242, 2260 or 2280 NVMe PCI x4 modules.
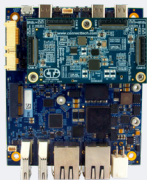
Features:
- PCIe Gen3 x4 interface
- 1x NVMe M.2 Key M Slot
- Direct 12V Power From an AGX103 or 2.1 external Positive Barrel jack
- 107.95 x 63.5 mm (4.25" x 2.50")

CARRIER BOARDS

	Rogue Carrier	Rogue-X Carrier	Rogue 10G Carrier	Rogue GMSL Carrier
Part Number	AGX101	AGX103	AGX105	AGX107
Dimensions	92mm x 105mm (3.62" x 4.13")	105mm x 105mm (4.13" x 4.13")	135mm x 105mm (5.31" x 4.13")	125mm x 100mm (4.92" x 3.94")
Weight	103g (3.63oz)		TBD	
Camera Inputs	6 x2 Lane MIPI CSI-2 OR 4 x4 Lane MIPI CSI-2	2x PCIe Gen2 x4 Connections (for ximea xiX cameras) 6x 2 Lane MIPI CSI-2 or 4x 4 Lane MIPI CSI-2	6 x2 Lane MIPI CSI-2 OR 4 x4 Lane MIPI CSI-2	6x GMSL2 Input (w/ PoC)
User Expansion	1x M.2 Key E Slot with PCIe & USB (WiFi + BT modules)	2x PCIe Gen2 x4 1x M.2 Key E Slot with PCIe & USB (WiFi + BT modules)	1x M.2 Key E Slot with PCIe & USB (WiFi + BT modules)	M.2 B-Key - for LTE (3042 size) - USB 2.0 + USB 3.0 M.2 E-Key - for WiFi/BT (2230 size) - USB 2.0 + PCIe x1
USB	3x USB 3.1 1x USB OTG		3x USB 3.1	2x USB 3.1 Type A 1x USB 2.0 Micro-B Port
Networking	2x Gigabit Ethernet		2x 10 Gigabit Ethernet from Intel® X550	1x Gigabit Ethernet
Display Output	2x HDMI 2.0			1x HDMI 2.0
Storage	1x Micro SD/UFS Card Slot | 2x NVMe M.2 Key M Slots	1x Micro SD/UFS Card Slot | 1x NVMe M.2 Key M Slots		1x Micro SD/UFS Card Slot | 1x NVMe M.2 Key M Slots | 1x 32kb EEPROM on I2C
UART	1x 4-pin Fan Connector (5V, 1x4 Picoblade)		2x @ 3.3V levels UART1 and UART2 1x USB based Debug UART3 (microUSB AB connector)	2x 3.3V Logic Level UARTs | 1x RS-232 Line Level UART
I2C/SPI	1x I2C Channel @ 3.3V IO | 1x SPI Channel @ 3.3V IO			N/A
CAN	2x CAN 2.0b Port			
GPIO	4 bits of 3.3V (level shifted GPIO)		Dedicated 2 GPO, 2 GPI (3.3V)	N/A
Input Power	Wide Input 9V to 19V DC		Regulated +12V Only Input (4-pin Mini-fit Jr. Connector)	Wide Input +11V to +60V DC
Operating Temperature	-40°C to +85°C (-40°F to +185°F) AGX105: Intel X550 has ambient temp of 0°C to +50°C			

CAMERA BOARDS

Also Jetson AGX Xavier™ Industrial Compatible!

Basler MIPI Camera Board

NEW **JCB001**

This expansion board allows up to 4 Basler Dart cameras to be connected to the Rogue or Rogue-X carriers.

Features:

• 4x Basler BCON MIPI Connectors

• Onboard power regulation

• Compact size

• 2x GPI and 2x GPO per camera

GMSL Camera Platform

JCB002

This expansion board supports up to 8x GMSL1 or GMSL2 cameras to be connected to the Rogue or Rogue-X carriers.

Features:

• GMSL1 or GMSL2 protocols

• Internal or External Camera power

• Allows longer length cabling as well as a direct path to the Jetson AGX Xavier ISPs

• Power over Coax; 4x mini coax connector

• Input voltage protection and Software power cycle

Allied Vision MIPI Board

NEW **JCB005**

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

Features:

• Simple integration of Allied Vision MIPI CSI-2 sensors to the Jetson AGX Xavier platform

• Connect up to 6x 2-lane or 4x 4-lane MIPI Cameras

• Seamless integration to the Rogue and Rogue-X Carrier Boards

FPD-Link III Board

NEW **JCB006**

This expansion board allows for the connection of FPD-Link III Deserializers to be connected to the Rogue or Rogue-X carriers
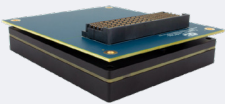
Features:

• 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

ACCESSORIES

Connector Saver
ADG110

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

Features:

• Minimizes contact damage

• Protects connectors from mating and unmating wear

• Dimensions: 92mm x 105mm (3.62" x 4.13")

• Compatibility: NVIDIA Jetson AGX Xavier, Connect Tech Rogue Carrier
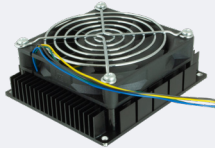
Active Heat Sink
XHG306

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

Features:

• Minimizes contact damage

• Protects connectors from mating and unmating wear

• Dimensions: 92mm x 105mm (3.62" x 4.13")

• Compatibility: NVIDIA Jetson AGX Xavier, Connect Tech Rogue Carrier
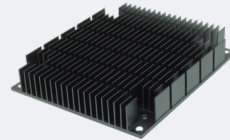
Passive Heat Sink
XHG305

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

Features:

• Minimizes contact damage

• Protects connectors from mating and unmating wear

• Dimensions: 92mm x 105mm (3.62" x 4.13")

• Compatibility: NVIDIA Jetson AGX Xavier, Connect Tech Rogue Carrier
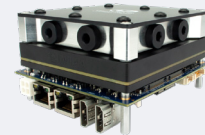
Liquid Cooling Block
XHG307

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

Features:

• Minimizes contact damage

• Protects connectors from mating and unmating wear

• Dimensions: 92mm x 105mm (3.62" x 4.13")

• Compatibility: NVIDIA Jetson AGX Xavier, Connect Tech Rogue Carrier

JETSON AGX XAVIER

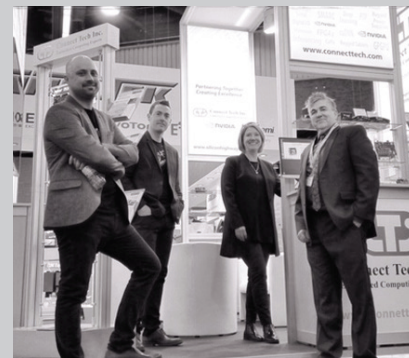|	Basler MIPI Camera Board	GMSL Camera Platform	Allied Vision MIPI Board	FPD-Link III Camera Board
Part Number	JCB001	JCB002	JCB005	JCB006
Size	75mm x 40.2mm (2.95" x 1.58")	75mm x 57mm (2.95" x 2.24")	75mm x 40.2mm (2.95" x 1.58")	75mm x 57mm (2.95" x 2.24")
Weight	25g (0.88oz)	50g (1.76oz)	19g (0.67g)	TBD
Connector	1x High Density Connector Camera Board will mate to the Camera Expansion Header on the Rogue or Rogue-X Carrier Board			
Camera Inputs	4x Basler BCON MIPI	8x Total (GMSL2/GMSL1)	Up to 6x MIPI CSI-2 (4x 4-lane or 6x 2-lane)	8x Total
Allied Vision Sensor Support	N/A		1500 C and 1800 C Series Alvium MIPI CSI sensors	N/A
Deserializer	N/A	Maxim MAX9296A	N/A	Texas Instruments DS90UB954
MIPI Output	N/A	A single 4-lane MIPI CSI-2 v1.3 output from each Deserializer (16-lanes total)	N/A	A single 4-lane MIPI CSI-2 v1.3 output from each Deserializer (16-lanes total)
Camera Input Connectors	4x 4-lane MIPI CSI-2 Connections to interface to Basler MIPI Cameras	2x MATE-AX Quad Coax Connectors Breakout cables to FAKRA available	6x FH55-22S-0.5SH Hirose Connectors	2x MATE-AX Quad Coax Connectors Breakout cables to FAKRA available
PoC (Power-over-Coax)	N/A	All 8 cameras will be sourced Power-Over-COAX from JCB002	N/A	All 8 cameras will be sourced Power-Over-COAX from JCB006
Power	Can be directly powered from Camera Expansion Header or External +12V Input			
Operating Temperature	-40°C to +85°C (-40°F to +185°F)			

EDGE DEVICES/CARRIER BOARDS

Rudi-NX
ESG602

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.

Features:

- Extremely small footprint: 135mm x 50mm x 105mm (5.3" x 2" x 4.1")
- 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 slot
- -20°C to +80°C (-4°F to +176°F) Operating Temperature Range

Rudi-NX FPD-Link III
#### ESG603 **NEW**

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.

Features:

- Extremely small footprint: 135mm x 50mm x 109mm (5.3" x 2" x 4.29")
- I/O: 4x FPD-Link III, 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 slot
- +9V to +36V wide input voltage range

Boson for FRAMOS
NGX007
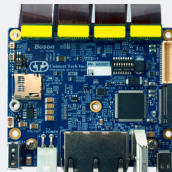
Boson for FRAMOS is an AI vision powerhouse, integrating up to four MIPI cameras within an extremely small footprint.

Features:

- 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

Quark
NGX004
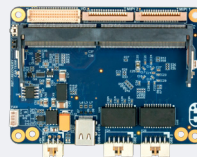
Quark Carrier is an affordable, ultra small feature rich carrier. Just slightly larger than the Jetson™ module, it's ideal for vision applications, inference, and unmanned payloads.

Features:

- 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
- +5V DC Input

Photon AI Camera Platform
NGX002, NGX003

The Photon carrier board is a Jetson AI Camera Platform specifically designed to support smart camera applications.

Features:

- 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

Note: While Boson, Quark, and Photon are compatible with NVIDIA Jetson Nano, TX2 NX, and Xavier NX SoMs, some I/O availability will change across modules.

ACCESSORIES

ACTIVE HEAT SINKS

Jetson Xavier NX - XHG312, XHG314

Jetson Nano - XHG309

Jetson TX2 NX - XHG318

PASSIVE HEAT SINKS

Jetson Xavier NX - XHG311

Jetson Nano - XHG308

Jetson TX2 NX - XHG317

THERMAL PLATES

Jetson Xavier NX - XHG313

Jetson Nano - 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, frame grabbers, storage, bluetooth modules, and more.

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

Specifications in chart are based on Jetson Xavier NX.

While Boson, Quark, and Photon are compatible with NVIDIA Jetson Nano, TX2 NX, and Xavier NX SoMs, some I/O availability will change across modules.

EDGE DEVICES

Cogswell Vision System
CVS001

Cogswell Vision System is pre-integrated with the NVIDIA® Jetson™ TX2. It comes in a black anodized metal enclosure and is both fanless and cable free.

Features:

- Specifically designed for use with GigE Vision Cameras
- 5 x Gigabit Ethernet Channels – 4 x PoE, 2 x PoE+ PSE Gigabit Ports
- Only a single +12V input required; No external 48V PoE power required
- 1 x USB 3.0, 1x USB 2.0, 1x USB OTG, 2x RS-232, 1x miniPCIe, 1x mSATA

Rosie Embedded System
ESG501

Rosie is a small form factor, rugged embedded system pre-integrated with the NVIDIA Jetson TX2 or TX2i. It is housed in a rugged compact enclosure.

Features:

- 163.6mm x 108.0mm x 96.3mm (6.438" x 4.250" x 3.790")
- 1x HDMI, 2x GbE, 2x USB 2.0, IEEE 802.11 ac, 1x RS-232
- +9V to +36V Power Input
- Designed to MIL-STD 810g and DO-160G for shock and vibration. Designed to IP68 ingress protection rating

### Rudi Embedded System
ESG503-ESG506

Rudi holds a lot of power in a small package and is pre-integrated with NVIDIA Jetson TX2, providing 256 CUDA® Cores.

Features:

- 1 TFLOP/s, 256 CUDA cores with NVIDIA Pascal GPU Architecture
- Extremely small footprint 135mm x 50mm x 105mm
- USB 3.0, USB 2.0, CAN 2.0b, USB OTG, RS-232, I2C, GPIO, WiFi, Bluetooth
- 1 x miniPCIe Slot with PCIe & USB Connectivity

TX2 Inference Server
UTX2AS
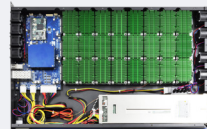
The TX2 Inference Server is a low wattage, high performance deep learning inference server powered by the NVIDIA Jetson.

Features:

- 24x 1 TFLOP/s, 6,144 GPU CUDA cores with NVIDIA Pascal architecture
- 2x 10G SFP+, 2x 1G SFP Uplink Capability
- 3x 2.5" SATA drives
- 1U ATX style redundant power supply

CARRIER BOARDS

Orbitty Carrier
ASG003

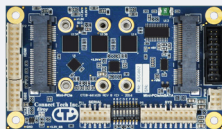Orbitty Carrier is designed to match the NVIDIA® Jetson™ TX2/TX2i module form factor. Orbitty is our best selling solution due to its combination of features, price point, and size.

Features:

• Ideal for robotics and unmanned applications or any small form factor rugged environment

• Extremely Small Size: 87mm x 50mm (3.42" x 1.96")

• 1x GbE, USB 3.0, USB 2.0, 1x HDMI, 1x MicroSD, 2x 3.3V UART, I2C, 4x GPIO

• +9V to +14V DC Nominal (+19V Peak)

Elroy Carrier
ASG002

Elroy Carrier is designed to match the NVIDIA Jetson TX2 or TX2i form factor. With locking pin-header connectors and industrial temperature range components, the Elroy is ideal for use in drones.

Features:

• Extremely Small Size: 87mm x 50mm (3.425" x 1.968")

• Head-to-Head Dual Mini-PCIe

• Dual x2 MIPI CSI-2 Video Inputs

• Locking pin-header connectors

• Operating Temperature -40°C to +85°C (-40°F to +185°F)

Astro Carrier
ASG001, ASG012

Astro is specifically designed to work with the NVIDIA Jetson TX2 or TX2i. The Astro Carrier provides access to features found on the Jetson TX2/TX2i module.

Features:

• 2 Gigabit (10/100/1000) Ports

• USB and HDMI Ports

• Use with COTS or custom breakout boards

• Extended Temperature Range -40°C to +85°C (Astro Carrier)

• Video Inputs: MIPI, GMSL (ASG012)

Sprocket Carrier
ASG008

Sprocket Carrier is designed to match the NVIDIA Jetson TX2/TX2i module form factor. The Sprocket is our lowest price entry level product.

Features:

• Slimmest design possible in Z-axis – All components fit "under" TX2/TX2i module

• Extremely Small Size: 87mm x 50mm (3.42" x 1.96")

• 1x USB OTG, 1 x4 lane MIPI CSI-2, 2x 3.3V UART, I2C, 4x GPIO

• +12V to +16V DC Input Range

CARRIER BOARDS

Cogswell Carrier
ASG007

Cogswell Carrier for NVIDIA® Jetson™ TX2 and TX2i is ideal for use in Gigabit Ethernet Vision applications. Provides Gigabit Ethernet channels with built-in Power over Ethernet (PoE) sourcing capabilities, ideal for use with GigE Vision cameras.

Features:

• Specifically designed for use with GigE Vision Cameras

• 5 x Gigabit Ethernet Channels – 4 x PoE, 2 x PoE+ PSE Gigabit Ports

• Only a single +12V input required; No external 48V PoE power required

• 1 x USB 3.0, 1x USB 2.0, 1x USB OTG, 2x RS-232, 1x miniPCIe, 1x mSATA

### Spacely Carrier
ASG006, ASG009

Spacely Carrier for NVIDIA Jetson TX2/TX2i is an ideal product for unmanned vehicle applications, or any application where situational awareness is critical. Spacely enables users to simultaneously connect up to 6 MIPI CSI-2 cameras.

Features:

• Built-in expansion for a GPS/GNSS module

• Connect up to 6 MIPI CSI-2 Camera Inputs

• Tailored IO for easy connection to Pixhawk Autopilot

• 2x GbE, 1x uHDMI, 2x USB 3.0, 2x USB 2.0, 1x USB CLIENT, 1x miniPCIe Slot, mSATA Slot

Quasar Carrier
ASG016
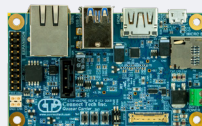
Quasar Carrier is an update to the Orbitty Carrier, designed to match the NVIDIA Jetson TX2/TX2 4GB/TX2i module form factor. While very similar to the popular Orbitty Carrier, the Quasar brings in a few new features while maintaining the small 87mm x 50mm footprint.

Features:

• Additions*: 2x USB 3.0, 1x 4-lane MIPI (I-PEX), 1x CAN, SATA 7-pin connector for storage

• Updated 1x HDMI 2.0 connector

• +9V – +14V DC Nominal (+19V Peak)

In comparison to ASG003, Orbitty Carrier

NVIDIA TX2 Dev. Kit Carrier
ASG018

The NVIDIA TX2 Dev. Kit Carrier features 12 lanes MIPI CSI-2, D-PHY 1.2, HDMI 2.0, GPIO, I2C, I2S, SPI, UART. This Carrier contains the same footprint and IO placements as TX2 Dev Kit, meant to be a drop-in replacement.

Features:

• NVIDIA TX2 Dev Kit Replacement

• Additional USB 3.0 Ports (5x Ports Total)

• +9V – +14V DC Nominal (+19V Peak)

Name	Orbitty	Elroy	Astro	Sprocket	Cogswell	Spacely	Quasar
Part Number	ASG003	ASG002	ASG001 w/ XBG206	ASG008	ASG007	ASG006	ASG016
Dimensions	87mm x 50mm (3.425" x 1.968")	87mm x 50mm (3.425" x 1.968")	87mm x 57mm (3.43" x 2.24")	87mm x 50mm (3.425" x 1.968")	178mm x 147.5mm (7.008" x 5.81")	125mm x 95mm (4.92" x 3.74")	87mm x 50mm (3.425 x 1.968)
Mini-PCIe/ mSATA	N/A	1x Mini-PCIe/mSATA half or full size (use of full size removes secondary Mini PCIe slot)	1x half size card or 1x full size card PCIe and USB signalling (Mini PCIe)	N/A	1 x miniPCIe Slot with PCIe & USB, x mSATA Full Size Slot	1 x miniPCIe Slot with PCIe, USB + SIM; 1x mSATA Full Size Slot	N/A
SATA	N/A	1x mSATA half or full size (use of full size removes secondary Mini PCIe slot)	1x SATA Link	N/A	N/A	N/A	1x SATA (7-pin Data Connector)
Display	1x HDMI	1x HDMI	1x HDMI	N/A	1x HDMI	1x HDMI	1x HDMI
Serial	2x 3.3V UART through discreet connector	2x RS-232/RS-485	2x RS-232/RS-485	2 x 3.3V from TX2 UART0 and UART1	2x RS-232	2x 3.3V from TX2 UART0 and UART1	2x 3.3V UART through discreet connector
CAN	N/A	N/A	N/A	N/A	1x CAN 2.0b Port	1x CAD 2.0b Port	N/A
USB	1x USB 3.0, 1x USB 2.0 OTG	1x USB 3.0 (Integrated USB 2.0), 1x USB 2.0	1x USB 3.0, 2x USB 2.0	1 x USB OTG	1 x USB 3.0, 1 x USB OTG (Micro-AB), 1 x USB 2.0, 1 x USB, 2.0 to miniPCIe Slot	2x USB 3.0, 1x USB OTG, 2x USB 2.0, 1x USB 2.0 to miniPCIe Slot	2x USB 3.0
Ethernet	1x GbE	1x GbE	2x GbE	N/A	5 x GbE (4x PoE, 2x PoE+)	1x GbE	1x GbE
Audio	HDMI Integrated Audio	HDMI Integrated Audio	HDMI Integrated Audio	N/A	N/A	HDMI Integrated Audio	HDMI Integrated Audio
SD Card	1x microSD Card Slot	1x microSD Card Slot	1x microSD Card Slot	N/A	1x microSD Card Slot	1x microSD Card Slot	1x microSD Card Slot
Video Inputs	N/A	2x 2-Lane (2x) MIPI CSI 2.0	1 x2 Lane MIPI CSI-2 2 x4 Lane MIPI CSI-2	1 x4 lane MIPI CSI-2	5x capable GbE ports	6 x2 Lane MIPI CSI-2 OR 3 x4 Lane MIPI CSI-2	N/A
Misc	I2C, 4x GPIO	1x I2C Link, 1x SPI Link, 1x System Control, 1x RTC Battery Input, 4x GPIO	1x I2C Link 1x System Control, 1x RTC Battery Input, 4x GPIO	1x USB OTG, I2C, 4x GPIO	1x USB OTG, I2C, CAN 2.0, GPIO	1x USB OTG, I2C, CAN, GPIO, 1x GPS/GNSS (optional), SPI Channel @ 3.3V IO	2x 3.3V UART, I2C, 4x GPIO, 1x CAN
Power Requirements	+9V to +14V DC Nominal (+19V Peak)	DC Input Range +12V DC Nominal Input	+9V to +36V Input	+9V to +16V DC	+12 DC Only	+12V to +22V DC	+9V - +14V DC Nominal (+19V Peak)

NVIDIA QUADRO MXM SOLUTIONS

COM Express Type 6 + GPU Embedded System
VXG Series

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

Features:

- GPUs can be targeted for 4 independent display outputs OR for a headless GPU processing system utilizing CUDA® cores
- CPU: Intel Alder Lake (12th Gen) and Tiger Lake (11th Gen) options available
- GPU: NVIDIA RTX 5000, RTX 3000, and T1000 Options Available

COM Express Type 7 + GPU Embedded System
V7G Series

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.

Features:

- GPUs can be targeted for 4 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 5000, RTX 3000 and T1000 Options Available

V7G GPU System
ESG7 Series

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.

Features:

- Ideal for highend 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 5000, RTX 3000 and T1000 Options Available

Connect Tech is a leader in high-end compute platforms for the embedded market. Choose from NVIDIA Quadro 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.

ESG701-01 - 2U Half-rack enclosure system

CHAT WITH THE JETSON EXPERTS

Our technical support team is easily accessible and allows for direct **Engineer to Engineer** communication.

Our **NVIDIA Jetson Support** page has Board Support Packages, User Manuals, Videos, and Articles on Flashing, Storage, and Integration.

Skilled & Expert Technical Staff Ready to Help

support@connecttech.com

CARRIER BOARDS

TYPE 7

Type 7 Carrier Board
CCG070
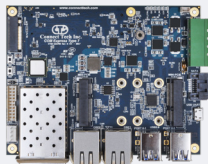
This Type 7 Carrier Board is ideal for high-compute, enterprise level applications needing access to high-end Intel® Xeon® D class processors.

Features:

• Dual 10-Gigabit Ethernet

• Ultra High Speed Storage with M.2 NVMe SSD support

• Extremely Small Form Factor: 125 x 95mm

• Extended Temperature Range -40°C to +85°C

TYPE 10

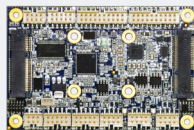### Type 10 PC Connector Carrier
CCG022

This Type 10 PC Connector Carrier is an extremely small carrier board featuring a combination of PC style connectors and locking pin header connectors.

Features:

• Extremely small size: 84mm x 73.415mm

• Support for the latest generation of low-powered CPUs

• 2 x USB 3.0 Type A, 6x USB 2.0, 2x RS-232, 2x GbE, 1x mSATA

Type 10 Mini Carrier Board
CCG010, CCG020

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

Features:

• Extremely small size, 84mm x 55mm

• Now supporting USB 3.0 on CCG020 model

• 2 x mini PCIe, mSATA, SATA, 2 x GBE, 6 x USB, LVDS, DisplayPort/HDMI/DVI/VGA, HD Audio, 2x RS-232/422/485

COMING SOON:
COM-HPC SOLUTIONS

Building on our broad COM Express offering Connect Tech is working on the release of our first COM-HPC carrier board. This off-the-shelf carrier board will allow users to get to market in the fastest time possible by using readily available hardware and avoiding a lengthy design cycle.

New High-Speed (HD) connector

• Support for PCIe Gen 4.0, 5.0 (16, 32 Gbps)

• 64 PCIe Lanes

• Min. 25 Gb Ethernet per signal pair to support 100 GbE

• Update of other interfaces to latest technology levels (e.g. USB4, SoundWire)

New form factors

• Enlarged real-estate compared to COMe

• Different FFs fitting to embedded and HPC applications

• Supports server class computing architectures

• Server CPUs, HW accelerators (FPGAs, GPUs), high memory capacity, sufficient power & cooling

• Target 25 to 300 W range

CARRIER BOARDS
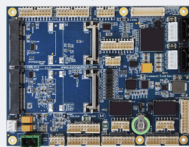## TYPE 6

Type 6 104e
CCG017, CCG018

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.

Features:

• 4x USB 3.0, 2x GbE, 2x RS-232/485, LVDS (2×24), 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

Type 6 Rugged Ultra Lite Carrier Board
CCG011, CCG012

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

Features:

• 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

Type 6 Ultra Lite Carrier Board
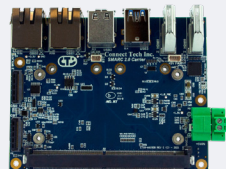#### CCG008

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

Features:

• COM Express® Type 6 Compatibility

• Mini-PCIe Expansion

• Supports latest Intel® processor sets

• Extended Temperature Range -40°C to +85°C

SMARC 2.0 Carrier
SRG004

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

Features:

• 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

EMBEDDED ETHERNET DEVICES

10 GbE

Xtreme/10G Managed Ethernet Switch/Router
XDG201-01, XDG202-01

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 4x 10G, 8x 1GbE (SGMII), and 24x 1GbE (Copper 10/100/1000Mbps) ports in an extremely small form factor 85mm x 85mm (3.35" x 3.35").

XDG202-01 features 1588 PTP support!

Features:

- 36 switchable ports (4x 10G; 8x 1GbE [SGMI]; 24x 1GbE)
- High-density board-to-board connector
- +4V to 14V input range
- 85mm x 85mm (3.35" x 3.35") module
- 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.

SMBStaX

IStaX

WebStaX

1 GbE

### LINQ/GbE
ESG301, ESG302

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.

Features:

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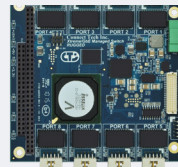
This 8 or 12 port Ethernet Switch is available with either standard RJ45 or rugged latching connectors, conduction cooled heatplates, and PC/104, PCIe/104 or standalone options.

Features:

- 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)

*Part #s: XDG004-XDG010, XDG012, XDG013, XDG016-XDG023

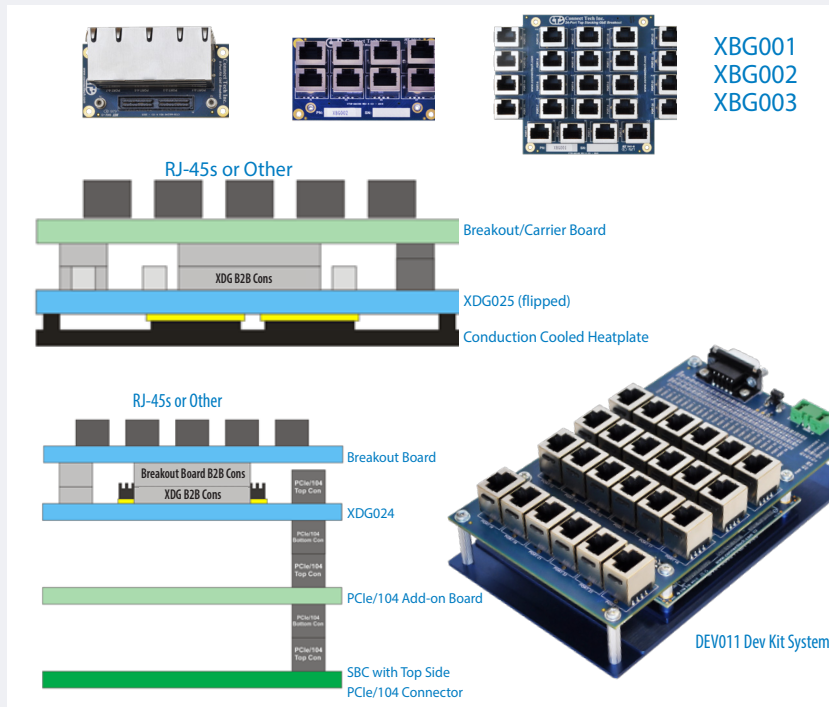## Xtreme/GbE 24-Port Managed Carrier Ethernet Switch
XDG024, XDG025
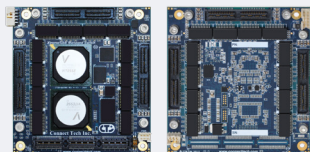
Xtreme/GbE 24-Port Managed Carrier Ethernet Switch provides high density, high port count, Carrier Grade Ethernet switching capabilities in an extremely small embedded form factor. Excellent for any space constrained, mission-critical application needing an embedded high-density/high-port count managed Ethernet Switch.

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

Features:

- 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

Breakout Boards

XBG001
XBG002
XBG003

RJ-45s or Other

Breakout/Carrier Board

XDG B2B Cons

XDG025 (flipped)

Conduction Cooled Heatplate

RJ-45s or Other

Breakout Board

Breakout Board B2B Cons
XDG B2B Cons

PCIe/104 Top Con

XDG024

PCIe/104 Bottom Con

PCIe/104 Top Con

PCIe/104 Add-on Board

PCIe/104 Bottom Con

PCIe/104 Top Con

SBC with Top Side PCIe/104 Connector

DEV011 Dev Kit System

FLASHING AS A SERVICE

Flash 100 units for $499*

Ready to go to production with your NVIDIA® Jetson™ design?

Have you considered the time involved or equipment and tools required for volume flashing?

**Connect Tech offers the following to flash your Jetson:**

- Configuration control, testing and integration
- A multi-flashing production environment
- Increased consistency, security and convenience

*Plus set-up fees, which include image optimization and direct engineering engagement

ADDING MORE STORAGE TO NVIDIA JETSON PROJECTS

Consider the following when starting your Jetson project:

- Developer Kits vs. Production Modules - Offer different storage capabilities
- On-board eMMC vs. External SD card vs. NVMe SSD
- Carrier Board or System Solutions - Provide additional capabilities, including SD or NVMe storage. Review Connect Tech's lineup within this Product Guide
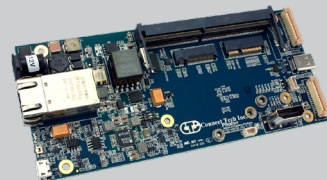
Read the full article at connecttech.com/news

PARTNER APPROACH

Taking an agnostic approach to computer on module, we understand that most customers select their module vendor before they consider their carrier board options. Therefore, we value our relationships with industry leaders such as:

Jetson Supported Camera Table!

We have partnered with trusted Jetson Ecosystem Camera Partners to develop solutions that ensure our hardware and software are compatible with various camera models, allowing customers to minimize overall application development time.

View our full list of supported Cameras from our Vision Partners by visiting **https://connecttech.com/vision-solutions**

TRUSTED VISION SOLUTIONS

As the capabilities of Edge AI Vision grows, finding solutions to easily integrate sensors with embedded hardware empowers rapid product development and field deployment.
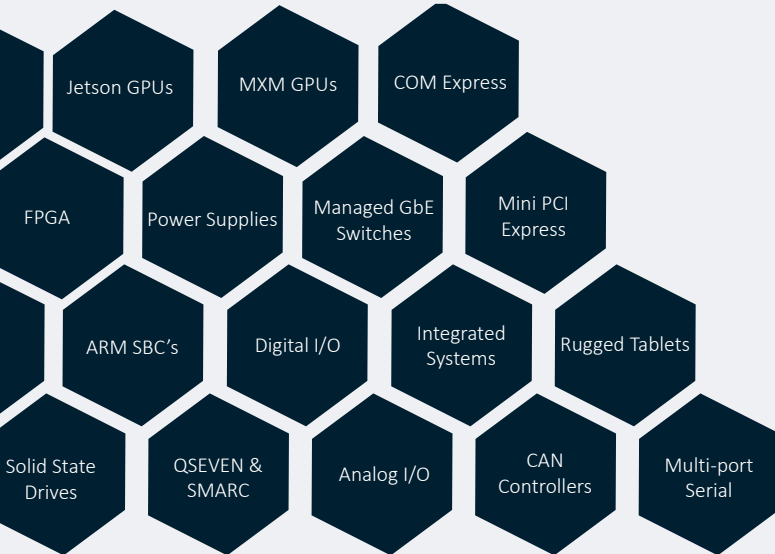
- Partnering with leading camera/ sensor providers
- Trusted hardware with integrated sensor software
- Minimize overall application development time

Allied Vision APPRO.PHO
BASLER Canon
Boulder AI CEPTON
D3 Engineering e-con Systems
FRAMOS Leopard imaging
LMI TECHNOLOGIES MYNT AI
Photoneo SONY
STEREOLABS TELEDYNE FLIR Everywhereyoulook
Velodyne LiDAR XIMEA

ENGINEERING SERVICES
Custom Product Development

IP Pool for Custom Design

- Jetson GPUs
- MXM GPUs
- COM Express
- FPGA
- Power Supplies
- Managed GbE Switches
- Mini PCI Express
- ARM SBC's
- Digital I/O
- Integrated Systems
- Rugged Tablets
- Solid State Drives
- QSEVEN & SMARC
- Analog I/O
- CAN Controllers
- Multi-port Serial

MODIFIED OFF-THE-SHELF

CUSTOM DESIGN

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 6-10 weeks

Connect Tech

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 over 36 years of embedded computing experience, Connect Tech's range of proven technology includes complete embedded systems, carrier boards, and thermal solutions, just to name a few. 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.

Serving customers around the globe

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Connect Tech Inc. - ISO 9001:2015 Certified

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