Cogswell Carrier for NVIDIA® Jetson™ TX2/TX2i/TX1

Connect Tech’s Cogswell Carrier for NVIDIA® Jetson™ TX2, TX2i, and TX1 is ideal for use in Gigabit Ethernet Vision applications. This product provides Gigabit Ethernet channels with built-in Power over Ethernet (PoE) sourcing capabilities, ideal for use with GigE Vision cameras.

Cogswell’s design includes a total of 5 Gigabit Ethernet Ports. Four of these ports can be used for IEEE 802.3af (PoE) 15.4W power sourcing or two of these ports can be used for IEEE 802.3at (PoE+) 25.5W power sourcing. Additionally the Cogswell Carrier also enables HDMI Video, USB 3.0, USB 2.0, USB OTG, Mini-PCIe/mSATA expansion, and two RS-232 Serial Ports.

**Specifications**

<table>
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<th>Compatibility</th>
<th>NVIDIA Jetson TX2, NVIDIA Jetson TX2i, NVIDIA Jetson TX1</th>
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</table>
| GPU            | Jetson TX2/TX2i: NVIDIA Pascal™, 256 CUDA cores (Up to 1.3 GHz)  
Jetson TX1: NVIDIA Maxwell™, 256 CUDA cores (998 MHz) |
| CPU            | Jetson TX2/TX2i: HMP Dual Denver 2/2MB L2 + Quad ARM® A57/2MB L2 (Up to 2 GHz)  
Jetson TX1: 64-bit ARM® A57 CPUs |
| Networking     | 5x Gigabit Ethernet Ports  
• 4 x IEEE 802.3af (POE) 15.4W PSE Gigabit Ethernet Ports  
OR  
• 2 x IEEE 802.3at (POE+) 25.5W PSE Gigabit Ethernet Ports |
| Display Output | 1 x HDMI 1.4a (Type-A, vert RA) (Supports up to HDMI 2.0 UHD 4K [2160p] at 60Hz) |
| USB            | 1 x USB 3.0 Port (Type-A), 1 x USB OTG (Micro-AB),  
1 x USB 2.0 (Type-A), 1 x USB 2.0 to miniPCIe Slot |
| Storage        | 1 x mSATA Full Sized Slot  
1 x microSD Card Slot |
| UART           | 2 x RS-232 |
| I2C            | I2C Channel 1 @ 3.3V IO |
| CAN            | 1 x CAN 2.0b Port |
| GPIO           | 4 bits of 3.3V (level shifted GPIO) |
| User Expansion | 1 x miniPCIe Slot with PCIe & USB |
| LEDs           | GbE LEDs, RESET#_OUT, PSU PGOOD |
| Input Power    | +12 DC Input Only  
No external 48V is required; carrier creates its own PoE power |
| Dimensions     | 178mm x 147.5mm (7.007874” x 5.807087”)  
Designed to fit into OEM enclosure |
| Buttons        | Power, Reset, Recovery |
| Operating Temperature | -40°C to +85°C (40°F to +185°F) |

*[1] The Jetson TX2/TX1 Module is rated for -25°C to +80°C (measured at thermal heat plate)*

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