Photon is the Jetson carrier board specifically designed to support smart camera applications. This Jetson platform provides a PoE PD Gigabit Ethernet uplink for data and power and has various I/O connectors positioned for easy packaging off the shelf camera housings. Additional key features include expansion for WiFi/BT, Cellular and NVMe as well as dual MIPI ( stereo) inputs.

Since Photon is compatible with the Jetson Nano, TX2 NX, and Xavier NX modules, users can seamlessly transition between modules depending on their AI processing requirements.

### Features

- Dimensions: 145mm x 64.5mm
- PoE PD (NGX002) capable, power via separate input or over Ethernet (IEEE 802.3af-2003 and IEEE 802.3 at 2009 compatible)
- For applications that don’t require PoE PD, ask about our lower cost options

### Specifications when used with Jetson TX2 NX module

**Front I/O (Camera End) MIPI Camera Inputs**
- 2x 2-lane MIPI CSI-2
  - 15-pin FPC 1mm Pitch Connector
  - Same MIPI connector used on Nano Dev Kit

**Front I/O (Camera End) USB**
- 1x USB 3.1 (Gen 1) (Connector: Type-C)

**Internal I/O Fan**
- 1x 4-pin PWM Fan Connector

**Rear I/O - Ethernet**
- 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
  - Lower-cost PoE Bypass Option Available

**Rear I/O - USB OTG**
- 1x USB 2.0 OTG for Flashing Capability (Micro USB)

**Rear I/O - Power Input**
- 1x 2mm DC Barrel Jack
- 12V DC +/-5%

**Rear I/O - Button**
- Dual RESET + FLASH Enable Functionality

**Wireless Expansion**
- 1x WiFi Module (M.2 2230 E-Key) (PCIe and USB)
- 1x LTE Module (M.2 3042 B-Key) w/ SIM Card Slot

**Storage**
- 1x microSD Card Slot

**Operating Temperature**
- -25°C to +85°C (-13°F to +185°F)

**Warranty and Support**
- 1 Year Warranty and Free Support

---

[1] Either NVMe OR WiFi module can be used. They cannot be used at the same time.

Integrations with external storage and WiFi/Bluetooth via Intel 8265 are also available, contact sales@connecttech.com for more details.

---

**RoHS**

Specifications subject to change without notice. ©2021 Connect Tech Inc. All trademarks are property of their respective holder. CTIX-00158(0.01) - 2021-07-19