



## Photon Jetson AI Camera Platform - Compatibility Specs

Module	NVIDIA® Jetson Xavier™ NX	NVIDIA® Jetson™ TX2 NX	NVIDIA® Jetson Nano™
<b>Feature Differences</b>			
Storage	1x NVMe PCIe x4 (Gen 3) (M.2 M-KEY) <sup>1</sup> 1x SD Card Slot	1x NVMe PCIe x2 (Gen 2) (M.2 M-KEY) <sup>1</sup> 1x SD Card Slot	1x NVMe PCIe x4 (Gen 2) (M.2 M-KEY) <sup>1</sup> 1x SD Card Slot
Front IO (Camera End) USB	1x USB 3.1 (Gen 2) (Connector: USB Type-C)	1x USB 3.1 (Gen 1) (Connector: USB Type-C)	1x USB 3.1 (Gen 1) (Connector: USB Type-C)
<b>Consistent Features</b>			
Dimensions	145mm x 64.5mm (5.71" x 2.53")	145mm x 64.5mm (5.71" x 2.53")	145mm x 64.5mm (5.71" x 2.53")
Front IO (Camera End) MIPI Camera Inputs	2x 2-lane MIPI CSI-2 • 15-pin FPC 1mm Pitch Connector	2x 2-lane MIPI CSI-2 • 15-pin FPC 1mm Pitch Connector	2x 2-lane MIPI CSI-2 • 15-pin FPC 1mm Pitch Connector • Same MIPI connector used on Nano Dev Kit
Front IO (Camera End) Camera MISC Interface	<ul style="list-style-type: none"> <li>• 1x I2C (Can be used for Lens Control)</li> <li>• 4x GPIO (Can be used for Additional Camera Control)</li> <li>• 1x Power Output (Can be used for IR LEDs)</li> </ul>	<ul style="list-style-type: none"> <li>• 1x I2C (Can be used for Lens Control)</li> <li>• 4x GPIO (Can be used for Additional Camera Control)</li> <li>• 1x Power Output (Can be used for IR LEDs)</li> </ul>	<ul style="list-style-type: none"> <li>• 1x I2C (Can be used for Lens Control)</li> <li>• 4x GPIO (Can be used for Additional Camera Control)</li> <li>• 1x Power Output (Can be used for IR LEDs)</li> </ul>
Internal IO Display Output	1x HDMI (Type-A Vertical)	1x HDMI (Type-A Vertical)	1x HDMI (Type-A Vertical)
Rear IO – Ethernet	<ul style="list-style-type: none"> <li>• 1x 1000BASE-T Uplink</li> <li>• PoE IEEE 802.3af-2003 (15.4W) PD</li> <li>• PoE+ IEEE 802.3at-2009 (25.5W) PD</li> <li>• Capable of operating on either network</li> <li>• Lower-cost PoE Bypass Option Available</li> </ul>	<ul style="list-style-type: none"> <li>• 1x 1000BASE-T Uplink</li> <li>• PoE IEEE 802.3af-2003 (15.4W) PD</li> <li>• PoE+ IEEE 802.3at-2009 (25.5W) PD</li> <li>• Capable of operating on either network</li> <li>• Lower-cost PoE Bypass Option Available</li> </ul>	<ul style="list-style-type: none"> <li>• 1x 1000BASE-T Uplink</li> <li>• PoE IEEE 802.3af-2003 (15.4W) PD</li> <li>• PoE+ IEEE 802.3at-2009 (25.5W) PD</li> <li>• Capable of operating on either network</li> <li>• Lower-cost PoE Bypass Option Available</li> </ul>
Rear IO – USB OTG	1x USB 2.0 OTG for Flashing Capability (Micro USB)	1x USB 2.0 OTG for Flashing Capability (Micro USB)	1x USB 2.0 OTG for Flashing Capability (Micro USB)
Rear IO – USB UART	1x 2mm DC Barrel Jack +12V DC +/-5%	1x 2mm DC Barrel Jack +12V DC +/-5%	1x 2mm DC Barrel Jack +12V DC +/-5%
Rear IO – Power Input	1x 2.1mm DC Barrel Jack (+12V DC +/-5%) 3-Pin External RTC Battery Connector (Rev E and onwards)	1x 2.1mm DC Barrel Jack (+12V DC +/-5%) 3-Pin External RTC Battery Connector (Rev E and onwards)	1x 2.1mm DC Barrel Jack (+12V DC +/-5%) 3-Pin External RTC Battery Connector (Rev E and onwards)
Rear IO - User Feedback	1x RGB LED, I2C controlled	1x RGB LED, I2C controlled	1x RGB LED, I2C controlled
Wireless Expansion	1x WiFi Module (M.2 2230 E-Key) (PCIe and USB) <sup>1</sup> 1x LTE Module (M.2 3042 B-Key) (USB) w/ SIM Card Slot	1x WiFi Module (M.2 2230 E-Key) (PCIe and USB) <sup>1</sup> 1x LTE Module (M.2 3042 B-Key) (USB) w/ SIM Card Slot	1x WiFi Module (M.2 2230 E-Key) (PCIe and USB) <sup>1</sup> 1x LTE Module (M.2 3042 B-Key) (USB) w/ SIM Card Slot
Internal IO Fan	1x 4-pin PWM Fan Connector	1x 4-pin PWM Fan Connector	1x 4-pin PWM Fan Connector
Weight	76g (2.68oz)	76g (2.68oz)	76g (2.68oz)
Operating Temperature	-25°C to +85°C (-13°F to +185°F)	-25°C to +85°C (-13°F to +185°F)	-25°C to +85°C (-13°F to +185°F)

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