Connect Tech

LEPTON FPD-LINK III
CARRIER BOARD

FOR NVIDIA® JETSON ORIN™ NX & ORIN™ NANO
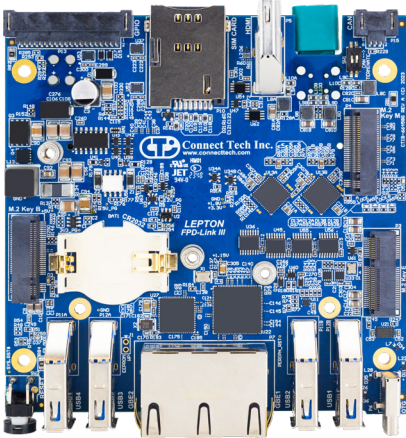
PART NUMBER: NGX022

The Lepton FPD-Link III Carrier Board is designed for the NVIDIA® Jetson Orin™ NX and Jetson Orin™ Nano modules for seamless integration and enhanced functionality.

Lepton features dual GbE ports and abundant USB connectivity with four USB 3.0 ports. With four FPD-Link III camera inputs, NVMe storage expansion, and versatile M.2 slots, Lepton offers flexibility for diverse applications.

NVIDIA Elite Partner

Equipped with comprehensive I/O connectors, CAN FD support, and a wide input power range, Lepton is the perfect solution for advanced machine learning, computer vision, and robotics projects.

FEATURES

✓ 4x FPD-Link III camera inputs

✓ Dimensions: 104mm x 110mm x 34mm

✓ USB 3.0, USB 2.0, CAN FD, USB 3.1 OTG, RS-485, I2C, GPIO, SPI, PWM OUT

✓ Storage available through NVMe

✓ WiFi, Bluetooth, and LTE modem expansion

✓ Passive, Active, and Thermal Transfer Plate cooling options available

SPECIFICATIONS

Module Compatibility	NVIDIA® Jetson Orin™ NX and Jetson Orin™ Nano	**FPD-Link III Camera Inputs**	• 4x FPD-Link III Camera Inputs (Connector: Quad Micro COAX) • Deserializers embedded on carrier board
Networking	Dual GbE (1 port from PCIe PHY controller)	**Storage Expansion**	1x NVMe (M.2 2280 M-Key)
Display Output	1x HDMI 2.0 (Type-A)	**Wireless Expansion**	1x WiFi Module (M.2 2230 E-Key) 1x LTE Module (M.2 3042 B-Key)
USB	• 4x USB 3.0 (Type-A) • 1x USB 3.1 OTG (Type-C) • 1x USB 3.0 + 2.0 port to M.2 B-Key • 1x USB 2.0 to M.2 E-Key	**MISC/IO connector**	• 2x UART (1x Console, 1x 3.3V) • 1x RS-485 • 2x I2C, 1x SPI, 2x PWM OUT, 4x GPIO (2x IN, 2x OUT) • 2x 5V • 2x 3.3V • 2x Isolated Camera Trigger Input • 9x GND
Operating Temperature	-40°C to +80°C (-40°F to +176°F)	**CAN**	1x Isolated CAN FD port (1Mbps max)
Mechanical Details	104mm x 110mm x 34mm (4.09" x 4.33" x 1.34")	**Input Power**	+9V to +36V DC Power Input (Mini-Fit Jr. 4-Pin Locking)
RTC Battery	CR2032 Battery Holder	**Weight**	127g (carrier only)
Warranty and Support	1 Year Warranty and Free Support		

RoHS