Connect Tech

ASTRO CARRIER BOARD
FOR NVIDIA® JETSON™ TX2/TX2i

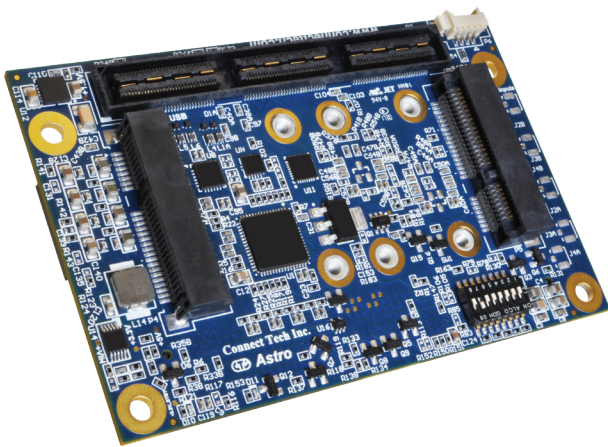**PART NUMBERS:** ASG001, ASG012, XBG201, XBG206

Astro is specifically designed to work with the NVIDIA® Jetson™ TX2 or TX2i supercomputer-on-module.

The Astro Carrier provides access to features found on the Jetson TX2/TX2i module in an extremely small footprint (87mm x 57mm/3.43" x 2.24").

NVIDIA ELITE PARTNER

Astro makes use of a high density, board-to-board connector that allows for use with break-out boards.

FEATURES

✓ 2 Gigabit (10/100/1000) Ports

✓ USB and HDMI Ports

✓ Use with COTS or custom break-out boards

✓ 87mm x 57mm (3.43" x 2.24")

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

SPECIFICATIONS

Compatibility	NVIDIA Jetson TX2 or TX2i	**Dimensions**	87mm x 57mm (3.43" x 2.24")
Mini PCIe Expansion	1x half size card or 1x full length card PCIe and USB signaling (Mini PCIe)	**Storage**	1x mSATA, half size card
USB	1x USB 3 port 2x USB 2 ports	**Network**	2x Gigabit (10/100/1000) Ports: • 1 from the Jetson Module; 1 from on-board Intel 82574 PHY/Controller
GPIO	4-bit GPIO	**CAN BUS**	1x CAN bus
Display	1x HDMI interface (Supports up to HDMI 2.0 UHD 4K [2160p] at 60Hz)	**Audio**	HD Audio 1x stereo output
Serial	2x RS-232/485 hardware selectable ports	**Operating Temperature [1]**	-40°C to +85°C (-40°F to +185°F)
Misc. External Interfaces	I2C System Control (PWR and RST buttons) RTC battery input	**Connectors**	90-pin QSH Samtec connector to be mated to Connect Tech Inc. breakout boards
Video Input [2]	1x MIPI CSI-2 (2-lane) 2x GMSL * Power-Over-Coax Not Supported, external power must be provided to GMSL Camera Module	**Weight**	• ASG001 (Astro Carrier): 46 grams (with stand-offs attached) • XBG201 or XBG206 (Breakout Board): 51 grams • Astro + Jetson TX2/TX2i: 144 grams (with heatsink); 75 grams (without heatsink)

[1] The Jetson TX2 Modules are rated for -25°C to +80°C (measured at thermal heat plate)

[2] GMSL video inputs only supported on PN: ASG012 with RidgeRun Drivers/Software Support. GMSL Software Info Link: https://developer.ridgerun.com/wiki/index.php?title=-_MAX96705_MAX9286_GMSL_SERDES_Linux_Drivers. Contact: support@ridgerun.com

RoHS