

# **ZiggyBox™** Mini NVIDIA<sup>®</sup> Jetson<sup>™</sup> Computer System



# **High Performance, Compact Size**

The ZiggyBox provides a compact and highly cost-effective solution for AI at the edge and machine learning applications for industrial and lab applications. It is based around the NVIDIA® Jetson<sup>TM</sup> TX2/TX2i advanced computing module with NVIDIA Pascal<sup>TM</sup>-family GPU technology. The Jetson module is housed in a rugged miniature enclosure measuring only 2.5 x 2.6 x 3.8" (63 x 67 x 96mm).

ZiggyBox offers easy access to the most popular Jetson I/O features, including Ethernet, USB 3.0 / 2.0 / OTG ports, HDMI display, and 2 RS-232 ports. The built-in carrier board adds a valuable data acquisition circuit with real-world analog and digital I/O features and software support.

An integrated heat sink provides reliable operation at up to 80oC without forced air. With its integrated Linux OS and table-top / DIN rail mounting options, ZiggyBox is ready to be deployed wherever the combination of highperformance computing and ultra-compact size are required.

## Features

- NVidia® Jetson<sup>™</sup> TX2 / TX2i processor
- 8GB RAM, 32GB Flash
- 1x 10/100/1000 Ethernet (RJ-45)
- 1x USB 3.0 Type A + 1x USB 2.0 Type A
- 1x USB 2.0 micro with OTG support
- ♦ 1x HDMI
- 2x RS-232
- 6x analog inputs, 12-bit resolution, 0-3.3V input range, up to 1Msps throughput
- 2x analog outputs, 12-bit resolution, 0-3.3V output range
- 12x digital I/O, 3.3V logic levels
- Wifi and Bluetooth connectivity (TX2 model only)
- Built-in Linux OS
- Input voltage:

9-15VDC (TX2 model) 9V-19VDC (TX2i model)

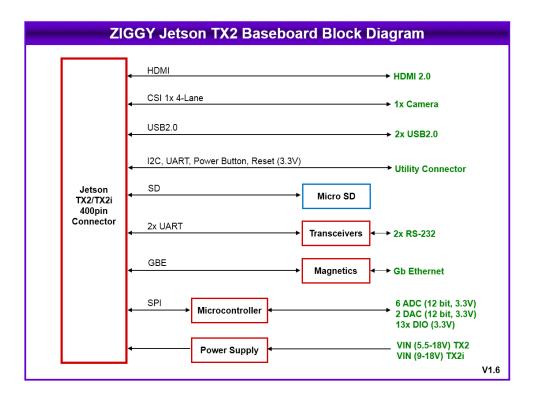
- Dimensions: 63 x 67 x 96mm / 2.5 x 2.6 x 3.7"
- ♦ Operating temperature: -40°C to 85°C



ZiggyBox internal electronics showing Jetson TX2/TX2i Module and Diamond Ziggy carrier board



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### **Data Acquisition**

ZiggyBox contains fullа fledged analog and digital I/O circuit that provides control and monitoring of real-world events such as sensors, temperature controls, keypads & switches, and industrial processes. All features are supported by Diamond's built-in data acquisition driver software, featuring а programming library with application demos plus an interactive GUI-based control program that offers real-time access and control.

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DIO PORT A In Out 0 0 0 0 0 1 0 0 0 0 2 0 0 0 0 3 0 0 0 0 4 0 1 0 5 0 0 0 0	PORT B In Out 0 0 0 0 0 1 0 0 0 2 0 0 0 3 0 1 0 4 0 0 0	A/D Controls           Channel A/D Code         Voltage(v)           0         2048         1.6492           1         4095         3.2999           2         0         0.0000           3         1024         0.8257           4         3000         2.4175           5         0         0.0000           D/A Control         D/A Control	Refresh Rate  GO	Special Function User LED Enable Disable ULAN Status Enable Disable Enable Disable Enable Disable Enable Disable
6 • • • • • • • • • • • • • • • • • • •	All In All out All = 0	Ch DAV 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Manual Update	Counter PWM
Camera 1	Camera2	On-Bu	Deard Power Supplies           Channel         Voltage(V)           12         1.800           13         3.300           14         5.000           15         12.000	Exit Firmware Version : 1.0 Status I/O Connector PinOut Relnitialize Board Exit Reset And Exit

#### **Ordering Information**

#### ZIGBOX-20-HD

ZiggyBox with TX2 module, heat sink (no fan), DIN bracket

#### ZIGBOX-21-HD

ZiggyBox with TX2i module, heat sink (no fan), DIN bracket