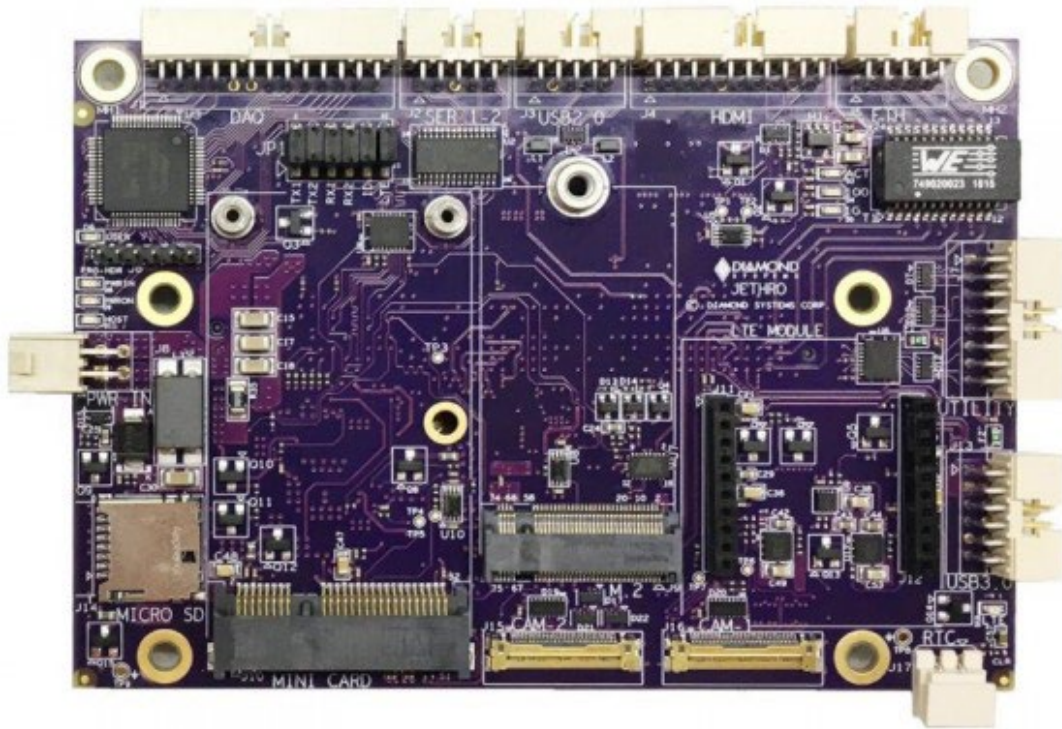


DIAMOND SYSTEMS JETHRO

COMPACT LOW-COST PLATFORM FOR EVALUATION



Key Features

- NVidia Jetson TX2 / TX2i carrier
- 2x 4-channel CSI camera inputs
- 1x 10/100/1000 Ethernet, HDMI
- 3x USB, wide range voltage input
- 6x analog inputs, 2x analog outputs
- 1x miniPCIe, 1 M.2 (SSD), 1x microSD
- -40 to +85°C temperature operation

Introduction

Jethro offers a compact, low-cost solution for the implementation of high-performance computing solutions based on the NVidia Jetson TX2/TX2i computer modules. Jethro provides access to most I/O features of the Jetson modules, including camera, Ethernet, USB, and serial. In addition, it features a unique data acquisition circuit with analogue input, analogue

output, and digital I/O to enable Jethro to interface to the "real world" of analogue and digital sensors and controls.

All I/O on Jethro uses latching connectors for increased resistance to shock and vibration. This plus an operating temperature range of -40 to +85°C make Jethro an ideal choice for deploying Jetson computing technology in vehicle or outdoor environments.

Diamond provides a complete Linux BSP for Jethro with built-in support for all I/O including the data acquisition features. A GUI provides convenient real-time control of the data acquisition I/O

Mass storage

Jethro contains an M.2 2242 size socket for the addition of up to 256GB of additional SATA-based mass storage. A micro-SD socket is also provided.

Expansion capabilities

A PCIe MiniCard socket enables the installation of additional I/O to meet the needs of diverse applications. A modem socket on Jethro enables the installation of cost-effective and pre-approved Nimbeline™ Skywire® cellular modems featuring a range of global cellular standards.

Adapter/Carrier

| Features | For Jetson TX2/TX21 modules |
|-------------|---|
| Connections | 2x 4-channel CSI camera inputs 1x 10/100/1000 Ethernet 1x USB 3.0 + 2x USB 2.0 1x HDMI 2x RS-232 6x analog inputs, 12-bit resolution, 0-3.3V output range, up to 1Msps throughput 2x analog outputs, 12-bit resolution, 0-3.3V output range 12x digital I/O, 3.3V logic levels 1x PCIe MiniCard expansion socket with USB 1x M.2 2242 SATA socket for SSD up to 256GB 1x Micro-SD socket 1x Nimbeline™ Skywire® modem socket Latching connectors for all I/O for increased ruggedness |

General

| | |
|-------------|---|
| Electrical | Input voltage: 9-18VDC (with TX2 installed) Input voltage: 5.5-18VDC (with TX2i installed) |
| Mechanical | 107mm x 76mm / 4.2" x 3.0" |
| Software | N/A |
| Temperature | Temperature range (operation): -40 to +85°C Temperature range (storage): -40 to +85°C |
| Warranty | 2 Years |
| RoHS | Compliant |

Ordering Details

| | |
|-------------|--|
| Board | ZIG-001 Ziggy carrier board for Jetson TX2/TX2i computer on module (module and heat sink / fan sink not included) |
| Accessories | N/A |