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RAIBOX-ORNX

RAILWAY GRADE ORIN NX COMPUTER

HIGHLIGHTS

- NVIDIA Jetson Orin NX Super Mode Support
- AI ready for railway application with up to 157 TOPS
- High Speed Interfaces (2xGigabit Ethernet, USB 3.2)
- Wireless and 5G connectivity
- M.2 SSD support for enhanced storage
- Withstands extreme temperatures, shock & vibration
- Robust & secure gateway for railway infrastructure
- Low power operation (<40 Watts)
- EN50155 railway grade computer for reliability

TECHNICAL SPECIFICATIONS

Supported Modules	NVIDIA Jetson Orin NX 8GB / 16GB
Memory	8 GB 256-bit LPDDR5 / 16 GB 128 bit LPDDR5
Graphics Interfaces	1x HDMI 2.0(max resolution 3840x2160)
Interfaces	2x Gigabit Ethernet 1x USB 3.1 Type-A 1x USB 3.1 Type-C 2x CAN Bus (Isolated) 2x RS232/RS422/RS485 (Isolated) 4x Digital In, 4x Digital Out (Isolated) 4x GMSL (FAKRA Connector)
Wireless Communication	WiFi/Bluetooth/LTE Connectivity by extension sockets
Power Supply	10-75VDC
Extension Sockets	1x M.2 Key-E, 1x M.2 Key-B, 1x SIM
Mass Storage	2x M.2 Key-M SSD Slot
Ambient Conditions	-25°C ... +70°C
Form Factor / Dimensions	286 mm x 210 mm x 75 mm, 3650gr
Operating Systems	Ubuntu Linux 20.04 / 22.04
Standards	EN50155, EN45545-2 HL3, EN61373, EN60068, IP67
JetPack Support	JetPack 5.x / 6.x

Introducing the RAIBOX-ORNX, a ruggedized railway grade computer that meets the EN50155 standard, ensuring reliability and safety for your critical railway applications. Powered by the high-performance Orin NX 16GB SoM, this computer features 2x Gigabit Ethernet and GMSL Camera support, enabling seamless data transmission and processing.

With USB3.2, HDMI, 2x CAN, Wireless, and 5G connectivity, the RAIBOX-ORNX offers unparalleled flexibility and connectivity options. The M.2 SSD support further enhances its storage capabilities, making it ideal for storing and processing large amounts of data.

Designed to withstand extreme temperatures, shock, vibration, and electromagnetic interference, the RAIBOX-ORNX is the perfect solution for railway applications that require reliable and ruggedized computing power.

Whether you're looking for a powerful and dependable onboard computer for your train control and monitoring systems, or a robust and secure gateway for your railway infrastructure, the RAIBOX-ORNX is the perfect choice for your critical railway applications.

Railway

Transportation

Agriculture

Marine

RoHS COMPLIANT

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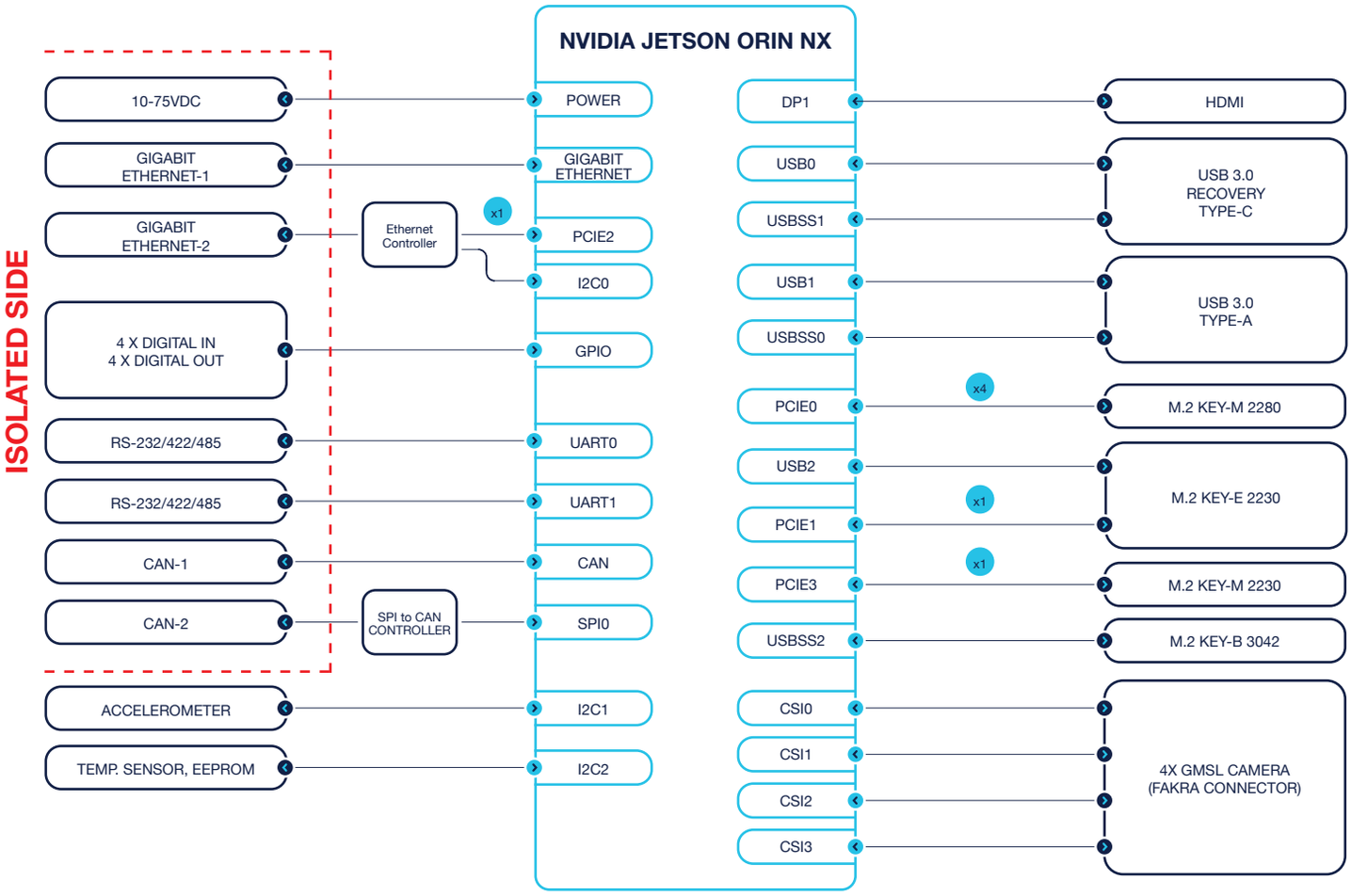
BLOCK DIAGRAM



FOR ORDERING

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