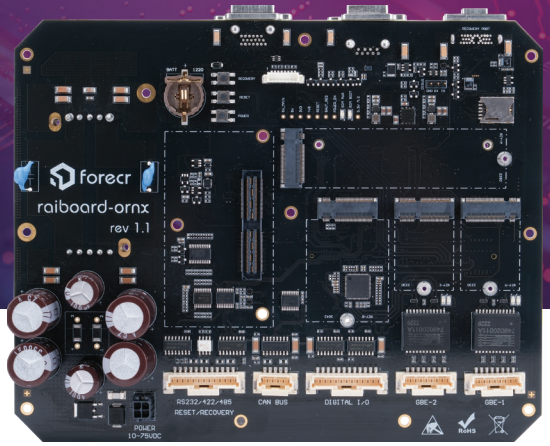




# RAIBOARD-ORNX

## RAILWAY GRADE ORIN NX & ORIN NANO CARRIER BOARD



### HIGHLIGHTS

- › EN50155 railway-grade carrier board for reliability
- › NVIDIA Jetson Orin Nano & NX Super Mode Support
- › AI ready for railway applications with up to 157 TOPS performance
- › Up to 4-ch GMSL2 support
- › Wireless and 5G connectivity
- › M.2 SSD support for enhanced storage
- › Robust & secure gateway for railway infrastructure
- › Low power operation (<60 Watts)
- › Ideal for critical railway applications

### TECHNICAL SPECIFICATIONS

<b>Supported Modules</b>	NVIDIA Jetson Orin Nano 4GB / 8GB NVIDIA Jetson Orin NX 8GB / 16GB
<b>Memory</b>	4 GB 64-bit LPDDR5 / 8 GB 128 bit LPDDR5 8 GB 256-bit LPDDR5 / 16 GB 128 bit LPDDR5
<b>Graphics Interfaces</b>	1x HDMI 2.0(max resolution 3840x2160)
<b>Interfaces</b>	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 (Isolated) 4x Digital Out (Isolated)
<b>Wireless Communication</b>	WiFi/Bluetooth/LTE Connectivity by extension sockets
<b>Power Supply</b>	10-75VDC
<b>Extension Sockets</b>	1x M.2 Key-E, 1x M.2 Key-B, 1x SIM
<b>Mass Storage</b>	2x M.2 Key-M SSD Slot
<b>Ambient Conditions</b>	-25°C ... +85°C
<b>Form Factor / Dimensions</b>	200 mm x 160 mm, 285 gr
<b>Operating Systems</b>	Ubuntu Linux 20.04 / 22.04
<b>Standards (with Raibox chassis)</b>	EN50155, EN45545-2 HL3, EN61373, EN60068, IP67
<b>JetPack Support</b>	JetPack 5.x / 6.x

The RAIBOARD-ORNX is a cutting-edge AI computing solution designed for railway applications, powered by NVIDIA Jetson Orin NX & Orin Nano. It delivers up to 157 TOPS of AI performance, ideal for real-time data processing and machine learning tasks.

Key features include dual Gigabit Ethernet ports, USB 3.2, and support for WiFi, Bluetooth, LTE, and 5G connectivity. Its dual M.2 SSD slots ensure high-speed, large-capacity data storage, making it suitable for applications like video analytics and monitoring. Built to withstand extreme temperatures (-25°C to 85°C), shock, and vibration, it complies with EN50155 and other railway standards. With low power consumption and robust design, the RAIBOARD-ORNX excels as a secure gateway and onboard AI engine for railway infrastructure and monitoring systems. This platform redefines reliability, efficiency, and AI-driven innovation in railway technology.



Railway



Transportation



Agriculture

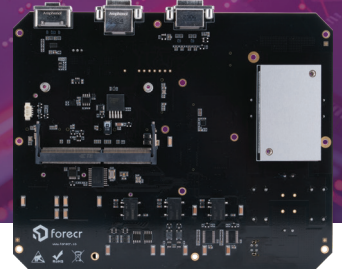


Marine

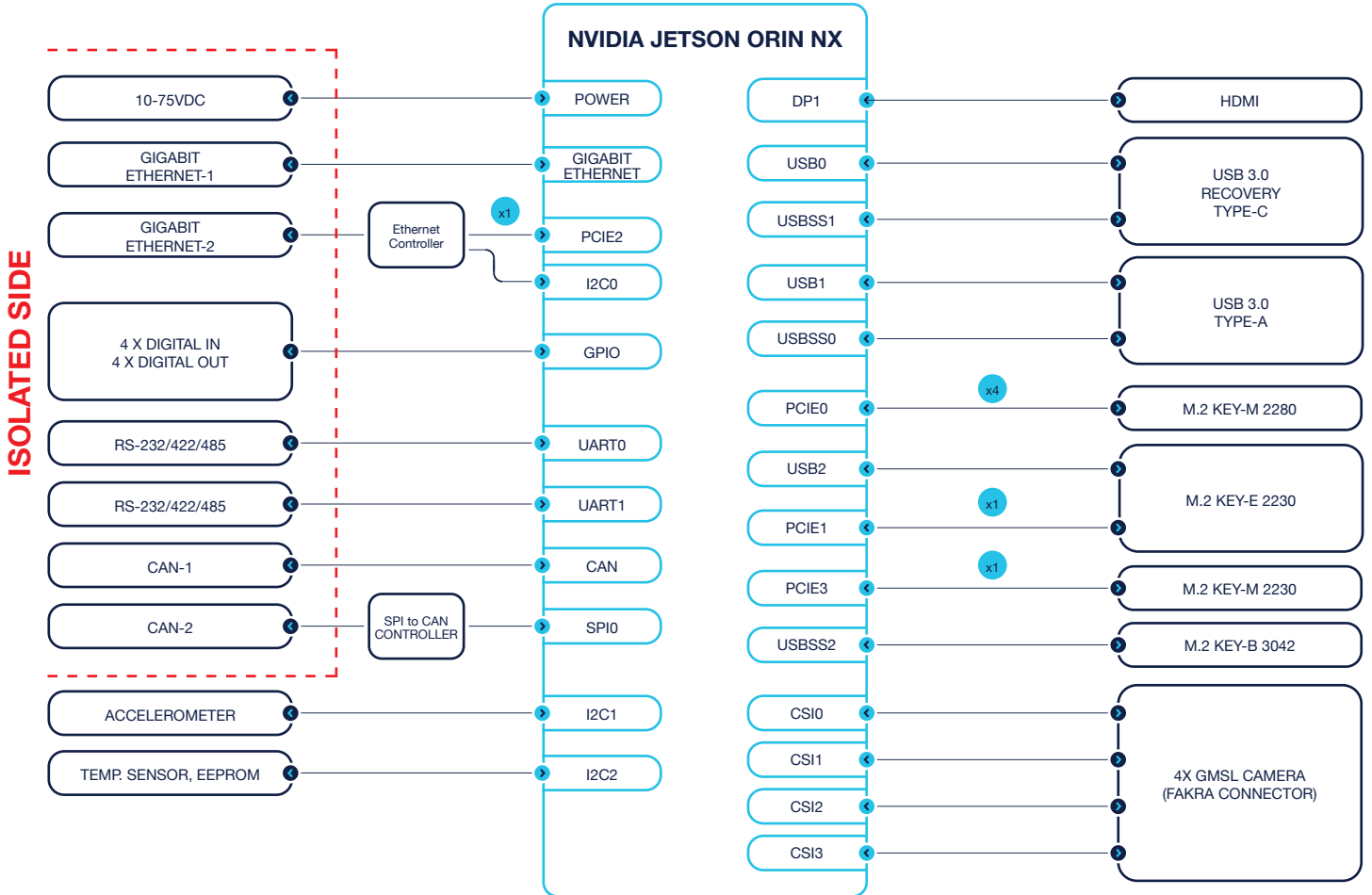


# RAIBOARD-ORNX

RAILWAY GRADE ORIN NX & ORIN NANO CARRIER BOARD



## BLOCK DIAGRAM



## FOR ORDERING



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