



Main Features

- On-board Intel® Atom™ Dual Core D525 processor
- One DDR2 SO-DIMM socket, DDR2 800 2G memory module support max.
- 1x M12 LAN port
- 2 x USB2.0 / 1x VGA / 2x RS232
- 1 x external CF Socket and one external SIM card holder
- 24V DC Input with 500V Isolated protection
- Support Ignition Signal for delay- time control
- Support WOL & PXE function

Product Overview

nROK 500 fanless computer with EN50155 certified is specially designed for transportation computing solution especially in railway related applications. Based on Intel® Atom™ D525 processor, nROK 500 is designed with isolated DC input protection to ensure stable operation in harsh environments. Adopting lock concept, all connectors, for example M12 Ethernet connector, on nROK 500 are designed against vibration. Equipped with a SIM card holder, CF socket and mini-PCIe socket for optional 3G wireless module, nROK 500 allows data to be transmitted over network and stored in a convenient SSD (Solid-State Drive) or CF card for better vibration and shock protection. EN50155 certified nROK 500 is a reliable accredited solution for railway applications.

Specifications

Main Board

- Onboard Intel® Atom™ Dual Core D525 1.8GHz processor, 1M Cache
- Chipset: Intel® ICH8M chipsets

Main Memory

- 1x DDR2 SO-DIMM socket, support 2G DDR2 667 and 800 MHz memory max., unbuffered and non-ECC

Storage

- CF Card socket: External accessible type, screwed with CF card cover
- 1x 2.5" SATA HDD drive bay for optional SSD

Expansion

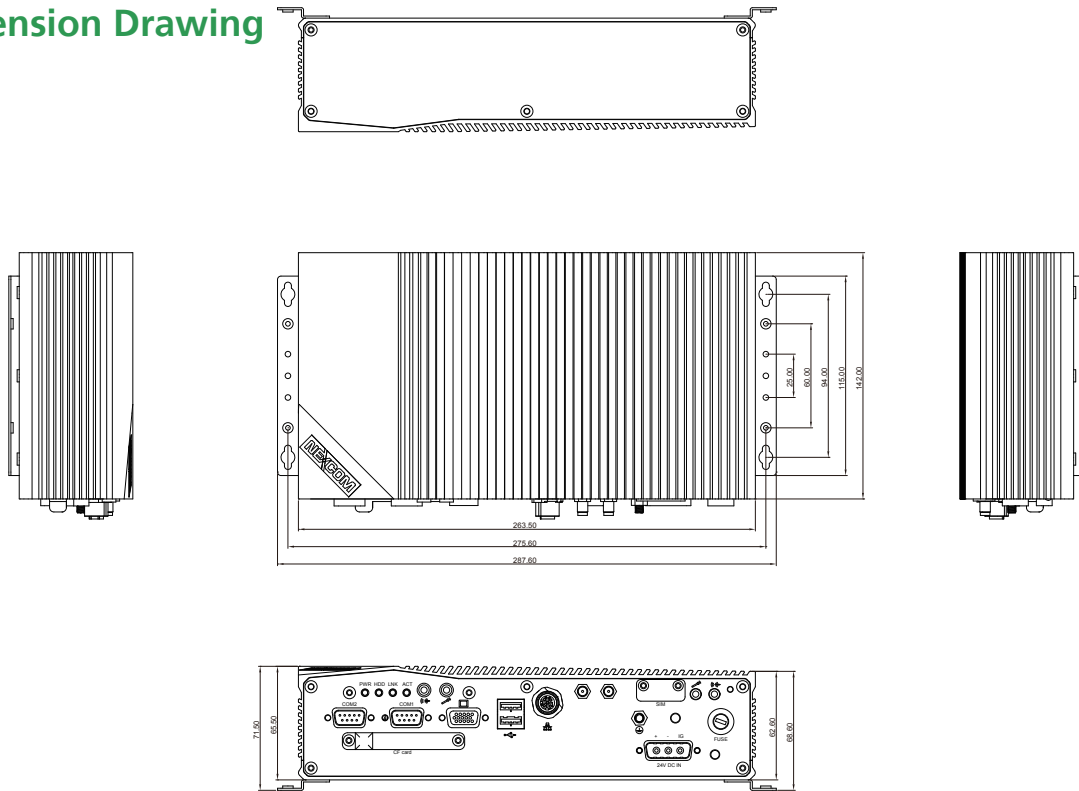
- 1 x Mini-PCIe socket (for optional 3G/3.5G Mobile wireless module)

I/O Interface-Front

- 1x VGA Output
DB15x1, support analog monitor with pixel resolution up to 2048 x 1536@75 Hz
- 2x RS232 COM Port
DB9 x 2, support 115.2 Kbps baud rate
- 2x USB Port
2x USB 2.0 ports, 500mA per port, covered with plastic cover to against the dust

- 1x Mic-in & 1x Speaker-out
 - Audio controller: High Definition Audio Controller, Realtek: ALC888-GR
 - 1x Speaker-out, Dia. 3.5mm phone jack, covered with plastic cover to against the dust
 - 1x Mic-in, Dia. 3.5mm phone jack, covered with plastic cover to against the dust
- 1x 10/100 M12 LAN Port
 - LAN Controller: Intel® WG82574L LAN controller x 1
 - Support Wake on LAN and boot from LAN function
- Wireless Communication
 - 1x External accessible SIM card socket
 - 1x Mic-in for wireless communication use
 - 1x Speaker-out for wireless communication use
 - 2x Antenna holes (for 3G/3.5G mobile wireless module)
- LEDs
 - 1x LED for power status
 - 1x LED for HDD status
 - 1x LED for 10/100 LAN Link
 - 1x LED for 10/100 LAN Active

Dimension Drawing



- DC Input
 - 24V as the nominal (Range: 16.8V ~ 30V)
 - Ignition signal input (24V, nominal; 0~10.5V = off, rest = on)
 - 500V Isolated design on DC Input
 - 1x External fuse

Validated Embedded OS

- Windows Embedded Standard 2009
- Windows Embedded Standard 7

System Dimension

- 264mm (W) x 142mm (D) x 65.5mm (H)

Environment

- Operating Temperature: -5°C ~ 55°C

Certifications

- CE
- EN50155

Ordering Information

- **nROK 500 (P/N: 10A00050000X0)**
Intel® Atom™ D525 1.8GHz Fanless Railway System