Datasheet

D115OXB/D115ONB Box PC [Preliminary]

NVIDIA® Jetson Orin NX/Orin Nano module

For Smart Retail, Smart Security and Smart City Applications

Overview

AVerMedia’s AI Box PC D115OXB/D115ONB equips powerful NVIDIA® Jetson Orin NX/Orin Nano module. This efficient system-on-module (SoM) opens new worlds of embedded IoT applications with full analytic capabilities.

D115OXB/D115ONB is designed for the industry applications with spatial concern and feature a rich assortment of I/O ports for rapid AI-based solution development and seamless deployment as required by demanding business applications.

AVerMedia supports businesses of all sizes and offers customizable BSP services, flexible MoQ, in addition to NVIDIA’s JetPack™ SDK.

Enterprise-Leading Features

- Embedded NVIDIA® Jetson Orin NX/Orin Nano module
- 2 x 2 Lane MIPI CSI-2 MIPI Camera input (internal)
- 2 x M.2. for WIFI and SSD
- 2 x GbE RJ-45
- 3 x USB 3.2 (1x internal)
- 1 x HDMI output
- 20-pins expansion header
- Dimension: W: 126mm x L: 96mm x H: 74mm

The AVerMedia Advantage

Video Processing Technology

Flexibility & Reliability

Dedicated After-Sales Support

AVerMedia understands that each business has a unique set of requirements that requires professional expertise and support. With AVerMedia, you are guaranteed to work with a proven global leader in video processing technology (200+ video capturing & streaming patents) with decades of experience processing multiple video signals for countless award-winning products.

A global leader that supports businesses of all sizes with comprehensive customization services (i.e., HW/PCB/BSP/etc.), flexible MoQ while ensuring a high-quality design and stable product. And for projects requiring additional security, we can provide customizable encryption hardware to support your privacy needs.

By partnering with us, a dedicated NVIDIA® ELITE Partner, our support-driven team offers prompt after-sales support so that your company stays focused on what matters most, customer acquisition.
**Application**

Powered by NVIDIA’s Jetson SoM, this power efficient SoM enables AI calculations and predictions on the edge of the network for applications such as driver safety and cost efficiency relationships. An expansive amount of interface options are available supporting AHD, IP, MIPI, etc., and is suitable for multiple scenarios requiring camera flexibility. And for various locations of installment the fanless design combined with optimized thermal chassis ensures full loading through a large temperature range.

**AVerMedia Ecosystem**

We provide a rich ecosystem of partners to support your growth with the ability to help search for new business partners for your unique project. Our verified partner ecosystem maintains the highest level of experience and professionalism, while offering hardware, software and strategic services. No matter the size or level of experience, if you are looking to accelerate your growth, we have the resources to make it happen.

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**Interface Diagram [Preliminary]**

- Front left:
  - 1x USB 2.0 Micro-B
  - 2x GbE RJ-45
  - 2x USB 3.0
  - 1x HDMI
  - Power and Recovery Button

- Front right:
  - DC IN
  - 2x I2C
  - 1x UART
  - 4x GPIOs
  - 1x CAN
  - DCIN ATX
  - 4pin 12~24V

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**Optional Accessories**

**MIPI Camera**

For 15 pin MIPI connector:
1. raspberry pi camera v2 / raspberry pi camera v3
2. Manufacturer: APPRO.PHO
   - B-04: IMX179 (8M) MIPI, 1080P (30fps)
   - C-04: IMX290 (2M) MIPI, 1080P (30fps)
   - C-05: IMX290 (2M) +ISP (YUV), 1080P (30fps)
# Specifications

<table>
<thead>
<tr>
<th></th>
<th>D115OXB-16G/D115OXB-8G</th>
<th>D115ONB-8G /D115ONB-4G</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
<td>Box PC</td>
<td>Box PC</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td>NVIDIA® Jetson Orin NX module</td>
<td>NVIDIA® Jetson Orin Nano module</td>
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<tr>
<td><strong>Networking</strong></td>
<td>2x GbE RJ-45</td>
<td>1xM.2. key E 2230 for wifi</td>
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<tr>
<td><strong>Display Output</strong></td>
<td>1x HDMI 4Kp60</td>
<td>1x HDMI 4Kp30</td>
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<tr>
<td><strong>Temperature</strong></td>
<td>Operating temperature 0°C~60°C (TBD)</td>
<td>Storage temperature -40°C ~ 85°C Relative humidity 40 °C @ 95%, Non-Condensing</td>
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<tr>
<td><strong>MIPI Camera Inputs (Internal)</strong></td>
<td>2x 2 lane MIPI CSI-2, 15 pin FPC 1mm Pitch Connector</td>
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<tr>
<td><strong>USB</strong></td>
<td>1x USB 2.0 Micro-B for recovery</td>
<td>3x USB 3.2 Type-A (2 x in the Front side; 1 x inside the Box PC)</td>
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<tr>
<td><strong>Storage</strong></td>
<td>1x M.2. key M 2280 for NVMe (256G SSD installed in box PC)</td>
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<tr>
<td><strong>Expansion Header</strong></td>
<td>20 pins: 2x I2C, 1x UART, 4x GPIOs, 1xCAN (EU terminal block)</td>
<td></td>
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<tr>
<td><strong>Power requirement</strong></td>
<td>DC in JACK on board &amp; ATX 4pin 12V/5A, 12V~19V is recommended.</td>
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<tr>
<td><strong>Power Cord</strong></td>
<td>US/JP/EU/UK/TW/AU/CN</td>
<td></td>
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<tr>
<td><strong>Fan Module</strong></td>
<td>Fanless solution</td>
<td></td>
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<tr>
<td><strong>Buttons</strong></td>
<td>Power and Recovery</td>
<td></td>
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<tr>
<td><strong>RTC Battery</strong></td>
<td>Support RTC battery and Battery Life Monitoring by MCU</td>
<td></td>
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<tr>
<td><strong>PCB/Electronics Mechanical Info</strong></td>
<td>W: 126mm (W) x 96mm (L) x 74mm (H) Weight: 1kg</td>
<td></td>
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<tr>
<td><strong>Certifications</strong></td>
<td>CE, FCC, KC</td>
<td></td>
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<tr>
<td><strong>Package</strong></td>
<td>1x D115OXB 16G or 8G (256G SSD installed) 1x Adapter and Power cable</td>
<td>1x D115ONB 8G or 4G (256G SSD installed) 1x Adapter and Power cable</td>
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</tbody>
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*All specifications are subject to change without prior notice.*