

VIA
AMOS-3003

Compact fanless embedded system ruggedized for extreme environments



Features

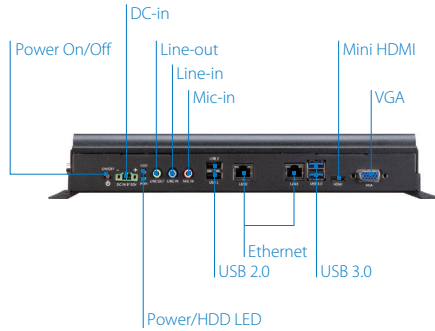
- 1.2GHz VIA Nano® X2 E-Series dual-core processor
- Wide input voltage range supporting 9V~30V DC-in
- Dual Gigabit Ethernet, optional Wi-Fi and dual 3G SIM card support
- Legacy I/O support including COM and GPIO
- Support for dual independent VGA + HDMI displays

Specifications

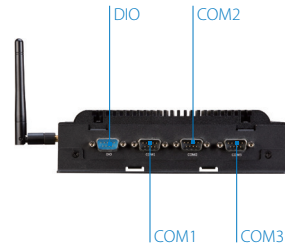
Model Name	AMOS-3003
Processor	1.2GHz VIA Nano® X2 E-Series
Chipset	VIA VX111H Media System Processor
BIOS	AMI Aptio UEFI BIOS, 32Mbit Flash memory
System Memory	1 DDR3 1333 SODIMM socket Up to 8GB memory size
Storage	Supports 1 2.5" SATA HDD/SSD 1 mSATA slot
Graphics	Integrated VIA C-640 DX11 3D/2D graphics with MPEG-2, WMV9, VC1 and H.264 video decoding acceleration
Audio	VIA VT2021 High Definition Audio Codec
Display I/O	1 Mini HDMI port 1 VGA port supporting VGA resolutions up to 2048 x 1536 pixels Dual independent VGA + HDMI display at different resolutions, pixel depths, and refresh rates
USB	2 USB 3.0 ports and 3 USB 2.0 host ports
LAN	VIA VT6130 PCIe Gigabit Ethernet controller Realtek RTL8111G PCIe Gigabit Ethernet controller Supports Wake On LAN (WOL) Supports Preboot Execution Environment (PXE) 11x5-pin header reserved to support VIA EMIO-1533 USB Wi-Fi module
COM	Fintek F81865
Expansion I/O	2 miniPCIe slots (supports 2 SIM slots) Supports optional Wi-Fi/3G modules Supports 3 external antenna for Wi-Fi, 3G module, and GPS module
Back Panel I/O	2 USB 3.0 ports 2 USB 2.0 ports 1 Mini HDMI port 1 VGA port 2 Gigabit Ethernet ports 3 Audio jacks: Line-out, Line-in and Mic-in 1 Power on/off button 1 Red LED for HDD activity 1 Green LED for power status 1 2-pole Phoenix DC jack
Left Panel I/O	3 COM ports for RS-232/422/485 (powered by selectable 5V/12V) 1 DIO port for 8-bit GPIO
Power Supply	9V ~ 30V DC-in (typical: 27W) Supports over voltage protection, over current protection, under voltage protection
Operating System	Windows 7, WES 7, Linux
VIA Smart ETK	BIOS flash tool, Hardware monitor, Watchdog timer, GPIO
Operating Temperature	-10°C ~ 60°C (SSD); 0°C ~ 45°C (HDD)
Operating Humidity	10% ~ 90% @ 45°C (non-condensing)
Storage Temperature	-20°C ~ 70°C



Back Panel External I/O



Left Panel External I/O



Specifications

Model Name	AMOS-3003
Vibration Loading During Operation	With mSATA or 2.5" SSD: 3Grms, IEC 60068-2-64, random, 5 ~ 500Hz, 1hr/axis
Shock During Operation	With mSATA or 2.5" SSD: 50G, IEC 60068-2-27, half sine, 11ms duration
Mechanical Construction	Aluminum mixed with heavy-duty steel with heat pipe embedded Aluminum top cover mixed with copper heat-pipe
Mounting	Built-in wall mountable brackets on system chassis
Dimensions	311mm(W) x 50.6mm(H) x 185mm(D) (12.24" x 1.99" x 7.28") (with wall mountable brackets)
Weight	3.5kg (7.7lbs)
Compliance	CE, FCC

Ordering Information

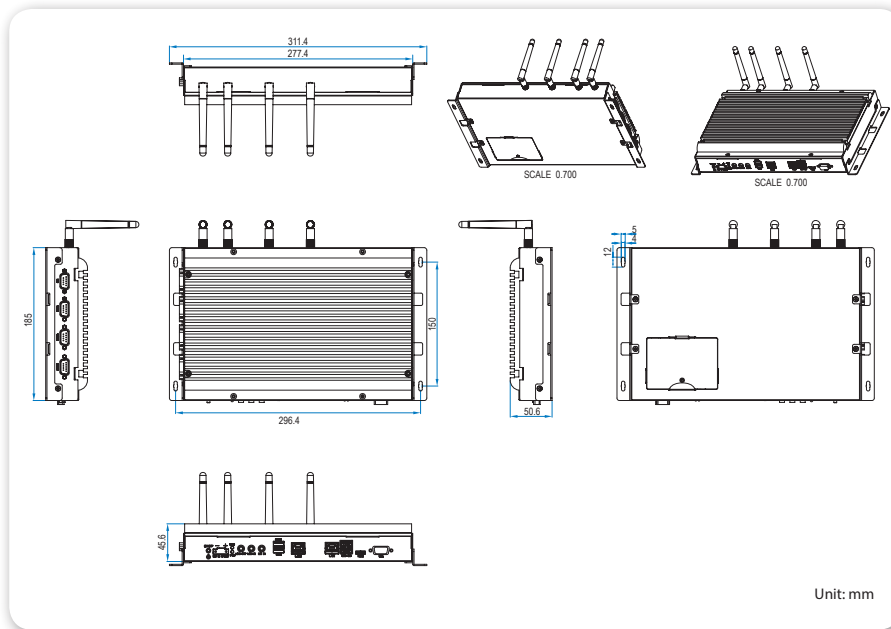
Part Number	CPU Frequency	Description
AMOS-3003-1D12A1	VIA Nano X2 E-Series @ 1.2GHz	1.2GHz VIA Nano X2 E-Series CPU based fanless embedded system with Mini HDMI, VGA, 2 USB 3.0, 2 USB 2.0, 3 COM, DIO, 2 Gigabit Ethernet, SATA, mSATA, 9V ~ 30V DC-in

Optional Accessories

External AC-to-DC Adapter and Power Cord	
Part Number	Description
99G63-020316	AC-to-DC Adapter, 2-pole, DC 12V/5A, 60W
99G33-02032C	Power Cord, 180cm, USA type
99G33-02034C	Power Cord with PSE mark, 180cm for Japan market
99G33-02033C	Power Cord, 180cm, Europe type

Wireless Modules	
Part Number	Description
00GO27100BU2B0D0	VNT9271 IEEE 802.11 b/g/n USB Wi-Fi dongle
EMIO-1533-00A2	VNT9271 IEEE 802.11 b/g/n USB Wi-Fi module with assembly kit and antenna
EMIO-5531-00A1	VAB-820-W IEEE 802.11 b/g/n USB Wi-Fi & Bluetooth module with assembly kit and antenna
EMIO-2531-00A1	VAB-820-W-M IEEE 802.11 b/g/n miniPCIe Wi-Fi & Bluetooth module with assembly kit and antenna
EMIO-2550-00A1	3.75G HSPA/UMTS mobile broadband full size miniPCIe module with GPS, SIM card slot, assembly kit and antenna

Dimensions



Packing List

Items
AMOS-3003 system
Phoenix plug to DC jack
Screw pack for mounting
Screw pack for miniPCIe cards and mSATA module
Screw pack for HDD
Thermal pad for HDD
Thermal pad for mSATA module
Thermal grease (0.5cc syringe)