

VIA
AMOS-3003

Compact fanless embedded system ruggedized for extreme environments



Features

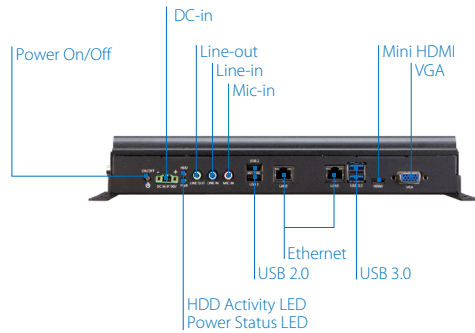
- 1.2GHz VIA Nano® X2 E-Series dual-core processor
- Wide input voltage range supporting 9V~30V DC-in
- Dual Gigabit Ethernet, optional Wi-Fi and dual 3G SIM card support
- Legacy I/O support including COM and GPIO
- Support for dual independent VGA + HDMI displays

Specifications

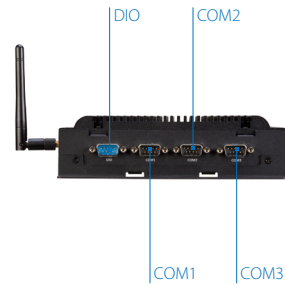
Model Name	AMOS-3003
Processor	1.2GHz VIA Nano® X2 E-Series CPU
Chipset	VIA VX11H Media System Processor
BIOS	AMI Aptio UEFI BIOS, 32Mbit Flash memory
System Power Management	ACPI 3.0 compliant, Wake-on LAN, keyboard power-on, timer power-on, system power management, AC power failure recovery, Watch Dog timer control
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 Chrome® 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 VNT9271 802.11n Wi-Fi USB 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 Side I/O	1 DIO port for 8-bit GPIO 3 COM ports for RS-232/422/485 (powered by selectable 5V/12V)
Watch Dog Timer	System reset; programmable 1-255 sec
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



Rear Panel I/O



Left Side I/O



Specifications

Model Name	AMOS-3003
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) (with wall mountable brackets)
Weight	3.5kg (7.7lbs)
Operating Temperature	-10°C ~ 60°C (SSD); 0°C ~ 45°C (HDD)
Storage Temperature	-20 °C ~ 70 °C
Operating Humidity	10% ~ 90% @ 45°C (non-condensing)
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 size, 11ms duration
Compliance	CE/FCC

Ordering Information

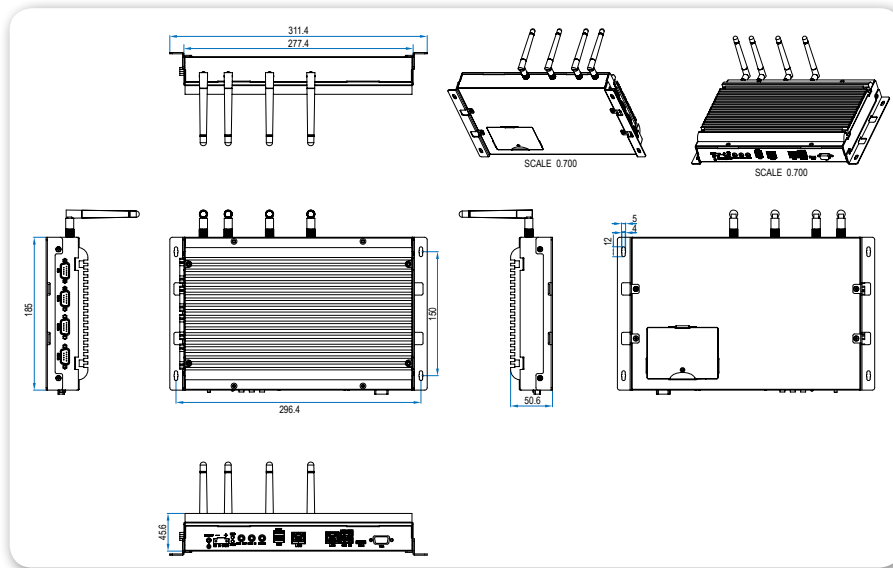
Part Number	CPU Frequency	Description
AMOS-3003-1D12A1	VIA Nano X2 E-Series @ 1.2GHz	1.2GHz VIA Nano X2 E-Series CPU based fanless embedded system with Mini HDMI, VGA, 2 USB 3.0, 2 USB 2.0, 3 COM, DIO, 2 Gigabit Ethernet, SATA, mSATA, 9V~30V DC-in

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
EMIO-1533-00A2	VNT9271BB05B-516 IEEE 802.11b/g/n USB Wi-Fi module with assembly kit
EMIO-2550-00A1	Ublox 3.75G HSPA/UMTS mobile broadband full size miniPCIe module with GPS and SIM card slot
EMIO-2550-01A1	Ublox 3.75G HSPA/UMTS mobile broadband full size miniPCIe module

Dimensions



Packing List

Items

- AMOS-3003 system
- 4 x M4*8mm screws with spring and flat washer for wall mounting (P/N:99G44-010395)
- 6 x M2*5mm screws for mini card and mSATA module (P/N:99G44-010155)
- 4 x M3*5mm screws for SSD/HDD (P/N:99G44-010645)
- 1 x Power cable, 2-pole Phoenix plug to DC-In (P/N:99G33-250043)
- 1 x Thermal pad for SSD/HDD (P/N:99H43-140762)
- 1 x Thermal pad for mSATA module (P/N:99H43-141016)