

Industrial Systems x86

VIA

AMOS-3005

Ultra-compact fanless system for embedded industrial applications ideally suited for demanding environments



Features

- Ultra compact, ruggedized form factor with multiple wall/DIN Rail/VESA mounting options
- High-performance fanless 1.2GHz VIA Eden® X4 processor
- DX11 graphics with MPEG-2/WMV9/VC-1/H.264 decoding acceleration
- Rich I/O feature set including lockable USB, RS-232/422/485, and GPIO
- Support for dual independent VGA + HDMI displays

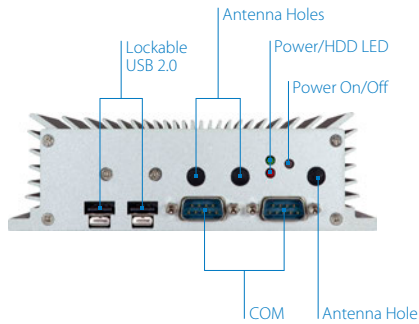


Specifications

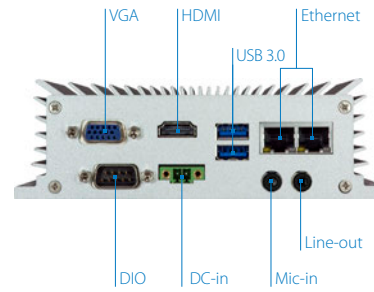
Model Name	AMOS-3005
Processor	1.2GHz VIA Eden® X4
Chipset	VIA VX11 Media System Processor
BIOS	AMI BIOS, 32Mbit Flash memory
System Memory	1 DDR3 1333 SDRAM SODIMM slot Up to 8GB memory size
Storage	Supports 1 mSATA slot
Graphics	Integrated C-640 DX11 3D/2D graphics with MPEG-2, WMV9, VC-1 and H.264 video decoding accelerator
Audio	VIA VT2021 High Definition Audio Codec
Display I/O	1 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 2 USB 2.0 ports (lockable USB ports for secure connections)
LAN	2 Realtek RTL8111G/H PCIe Gigabit Ethernet controllers
COM	Fintek F71869ED
Expansion I/O	1 miniPCIe slot 1 SIM card slot
Front Panel I/O	2 Lockable USB 2.0 ports 2 COM ports for RS-232/422/485 1 Power on/off button 1 Red LED for HDD activity 1 Green LED for power status 3 Antenna holes for 4G/GPS/Wi-Fi
Back Panel I/O	1 HDMI port 1 VGA port 2 USB 3.0 ports 2 Gigabit Ethernet ports 1 DIO port for 8-bit GPIO 2 Audio jacks: Line-out and Mic-in 1 2-pole Phoenix DC jack
Power Supply	9 ~ 36V DC-in (typical: 19W)
Operating System	Windows 10/8.1/8/7, Windows 10 IoT, WES 7, Linux
VIA Smart ETK	BIOS flash tool, Hardware monitor, Watchdog timer, GPIO, SMBus
Operating Temperature	-20°C ~ 60°C with qualified industrial grade mSATA
Operating Humidity	0% ~ 95% (relative humidity; non-condensing)
Storage Temperature	-20°C ~ 70°C
Vibration Loading During Operation	With mSATA Flash Drive: 5Grms, IEC 60068-2-64, random, 5 ~ 500Hz, 1hr/axis
Shock During Operation	With mSATA Flash Drive: 50G, IEC 60068-2-27, half sine, 11ms duration



Front Panel External I/O



Back Panel External I/O



Specifications

Model Name	AMOS-3005
Mechanical Construction	Aluminum top chassis housing Metal chassis housing Dual removable front & rear metal face plate
Mounting	Wall/DIN Rail/VESA mountable
Dimensions	150.5mm(W) x 48.1mm(H) x 109.8mm(D) (5.93" x 1.89" x 4.32")
Weight	1.4kg (3.08lbs)
Compliance	CCC, CE, FCC, BSMI, UKCA

Ordering Information

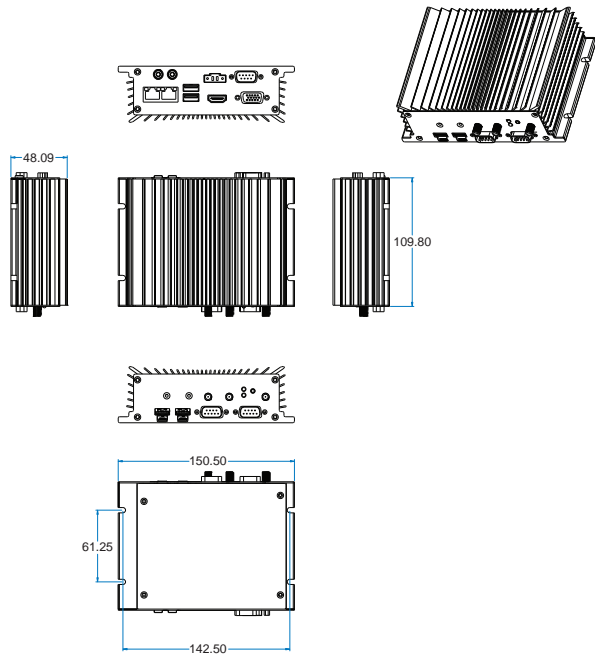
Part Number	CPU Frequency	Description
AMOS-3005-1Q12A2	VIA Eden® X4 @ 1.2GHz	1.2GHz VIA Eden® X4 CPU based fanless embedded system with HDMI, VGA, 2 USB 3.0, 2 Lockable USB 2.0, 2 COM, DIO, 2 Gigabit Ethernet, 9 ~ 36V DC-in power

Optional Accessories

External AC-to-DC Adapter and Power Cord	
Part Number	Description
99G63-020776	AC-to-DC adapter, DC 12V/5A, 60W
99G33-02032C	Power cord, 180cm, USA type
99G33-02033C	Power cord, 180cm, Europe type
99G33-02034C	Power cord with PSE mark, 180cm for Japan market

Wireless Modules	
Part Number	Description
00GO27100BU2B0D0	VNT9271 IEEE 802.11b/g/n USB Wi-Fi dongle
EMIO-1533-00A2	VNT9271 IEEE 802.11b/g/n USB Wi-Fi module with assembly kit and antenna
EMIO-5531-00A1	VAB-820-W IEEE 802.11b/g/n USB Wi-Fi & Bluetooth module with assembly kit and antenna
EMIO-2531-00A1	VAB-820-W-M IEEE 802.11b/g/n miniPCIe Wi-Fi & Bluetooth module with assembly kit and antenna
EMIO-2551-02A0	3.75G HSPA/UMTS mobile broadband full size miniPCIe module
EMIO-2551-03A0	3.75G HSPA/UMTS mobile broadband full size miniPCIe module with GPS
EMIO-2573-00A0	4G LTE mobile broadband full size miniPCIe module (North America only)
EMIO-2573-01A0	4G LTE mobile broadband full size miniPCIe module (Europe only)
EMIO-2573-02A0	4G LTE mobile broadband full size miniPCIe module (Japan only)

Dimensions



Unit: mm

Packing List

Items

- AMOS-3005 system
- Phoenix plug to DC jack
- Screw pack for mounting
- Screw pack for miniPCIe module
- Rubber feet pack
- Thermal pad for mSATA module
- Thermal pad for mSATA heatsink
- Quick Guide