

VIA  
AMOS-3006

Ultra-compact fanless system  
for embedded transportation  
applications in 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
- Support for Dual 4G SIM cards and dual Wi-Fi
- Rich I/O feature set including 2 CAN bus, lockable USB, RS-232/422/485, and GPIO
- Integrated power module supporting wide voltage range and smart power management for vehicles

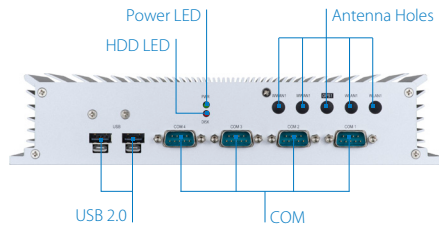


Specifications

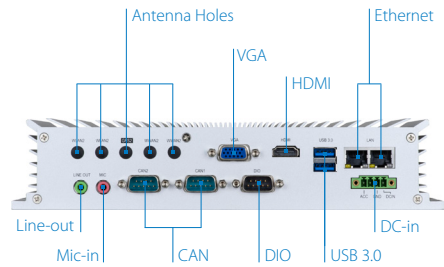
Model Name	AMOS-3006
Processor	1.2GHz VIA Eden® X4
Chipset	VIA VX11 Media System Processor
BIOS	AMI BIOS, 32Mbit Flash memory
System Memory	1 DDR3 1333 SDRAM SODIMM slot Up to 8GB memory size
Storage	Supports 1 mSATA slot
Graphics	Integrated C-640 DX11 3D/2D graphics with MPEG-2, WMV9, VC-1 and H.264 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 PCIe Gigabit Ethernet controllers
COM	Fintek F81865 Super I/O controller
CAN	2 MCP2518
Expansion I/O	2 miniPCIe slots (1 with PCIe + USB 2.0 signal, 1 with USB 2.0 signal only) 2 SIM card slots
Front Panel I/O	2 Lockable USB 2.0 ports 2 COM ports for RS-232/422/485 2 COM ports for RS-232 1 Red LED for HDD activity 1 Green LED for power status 5 Antenna holes for 4G, GPS, and 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 9-pin D-Sub connectors for 2 CAN bus ports 2 Audio jacks: Line-out and Mic-in 5 Antenna holes for 4G, GPS, and Wi-Fi 1 4-pole Phoenix DC jack
Power Supply	9~30V DC-in (typical: 19W)
Operating System	Windows 10/8.1/8/7, Win 10 IoT, WES 7, Linux
VIA Smart ETK	BIOS flash tool, Wake-on LAN, keyboard power-on, Timer power-on, Power Management, Watchdog timer, GPIO
Operating Temperature	-20°C ~ 60°C with qualified industrial grade mSATA and DRAM
Operating Humidity	0% ~ 95% (relative humidity; non-condensing)
Storage Temperature	-20°C ~ 65°C
Vibration Loading During Operation	With mSATA Flash Drive: 3Grms, IEC 60068-2-64, random, 5 ~ 500Hz, 1hr/axis



Front Panel External I/O



Back Panel External I/O



Specifications

Model Name	AMOS-3006
Shock During Operation	With mSATA Flash Drive: 50G, IEC 60068-2-27, half sine, 11ms duration
Mechanical Construction	Aluminum top chassis housing Metal chassis housing Dual removable front & rear metal face plates
Mounting	Wall/DIN Rail/VESA mountable
Dimensions	250mm(W) x 54.1mm(H) x 109.8mm(D) (9.8" x 2.1" x 4.3")
Weight	1.3kg (2.87lbs)
Compliance	CE, FCC, E-Mark

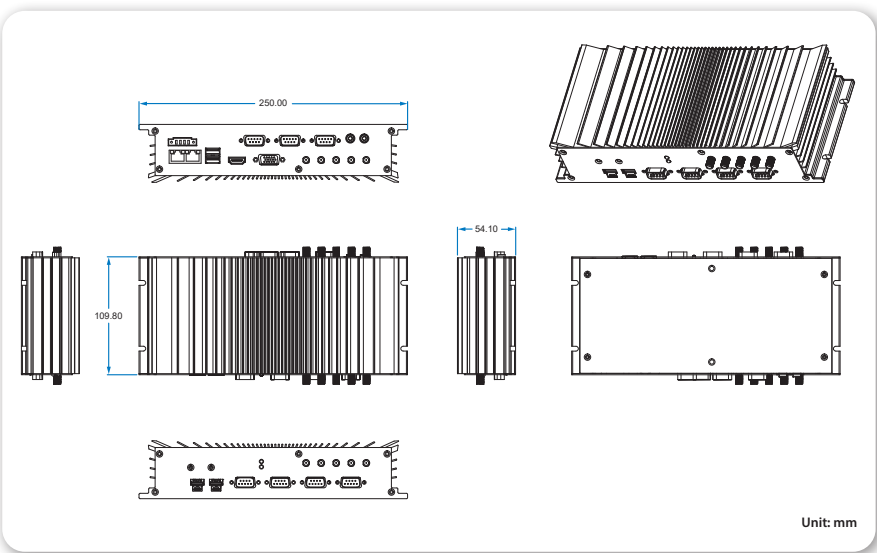
Ordering Information

Part Number	CPU Frequency	Description
AMOS-3006-1Q12A1	VIA Eden® X4 @ 1.2GHz	1.2GHz VIA Eden X4 CPU with fanless cooling system with HDMI, VGA, 2 USB 3.0, 2 Lockable USB 2.0, 4 COM, 2 CAN, DIO, 2 Gigabit Ethernet, 2 miniPCle, 9~30V DC-in power

Optional Accessories

Wireless Accessories	
Part Number	Description
EMIO-1542-00A1	DAUK-W8812 IEEE 802.11ac/a/b/g/n dual-band USB Wi-Fi module with assembly kit and antenna
EMIO-2531-00A1	VAB-820-W-M IEEE 802.11b/g/n miniPCle Wi-Fi & Bluetooth module with assembly kit and antenna
EMIO-2550-00A1	3.75G HSPA/UMTS mobile broadband full size miniPCle module with GPS, SIM card slot, assembly kit and antenna
EMIO-2551-02A0	3.75G HSPA/UMTS mobile broadband full size miniPCle module ( <b>Europe only</b> )
EMIO-2551-03A0	3.75G HSPA/UMTS mobile broadband full size miniPCle module with GPS ( <b>Europe only</b> )
EMIO-2573-00A0	4G LTE mobile broadband full size miniPCle module with assembly kit and antenna pack ( <b>USA only</b> )
EMIO-2573-01A0	4G LTE mobile broadband full size miniPCle module with assembly kit and antenna pack ( <b>Europe only</b> )
EMIO-2573-02A0	4G LTE mobile broadband full size miniPCle module with assembly kit and antenna pack ( <b>Japan only</b> )

### Dimensions



### Packing List

Items
AMOS-3006 system
4-pole Phoenix plug connector
Screw pack for miniPCle & mSATA modules
2 thermal pads for mSATA module & heatsink
Screw pack for mounting
Rubber feet pack

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