

VIA  
**AMOS-3006**

Ultra-compact fanless system for embedded transportation applications in demanding environments



**Features**

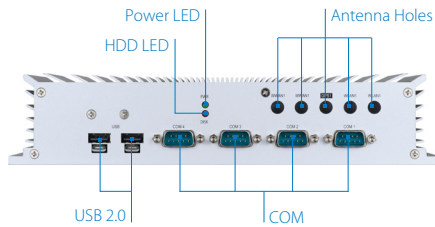
- Ultra compact, ruggedized form factor with multiple wall/DIN Rail/VESA mounting options
- High-performance fanless 1.2GHz VIA Eden® X4 processor
- Support for Dual 4G SIM cards and dual Wi-Fi
- Rich I/O feature set including 2 CAN bus, lockable USB, RS-232/422/485, and GPIO
- Integrated power module supporting wide voltage range and smart power management for vehicles

**Specifications**

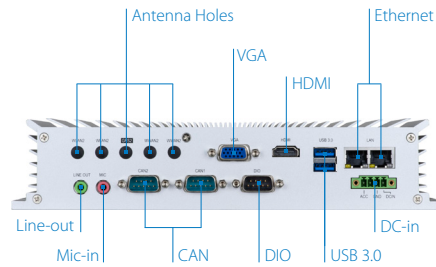
<b>Model Name</b>	<b>AMOS-3006</b>
<b>Processor</b>	1.2GHz VIA Eden® X4
<b>Chipset</b>	VIA VX11 Media System Processor
<b>BIOS</b>	AMI BIOS, 32Mbit Flash memory
<b>System Memory</b>	1 DDR3 1333 SDRAM SODIMM slot Up to 8GB memory size
<b>Storage</b>	Supports 1 mSATA slot
<b>Graphics</b>	Integrated C-640 DX11 3D/2D graphics with MPEG-2, WMV9, VC-1 and H.264 video decoding accelerator
<b>Audio</b>	VIA VT2021 High Definition Audio Codec
<b>Display I/O</b>	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
<b>USB</b>	2 USB 3.0 ports, 2 USB 2.0 ports (lockable USB ports for secure connections)
<b>LAN</b>	2 Realtek RTL8111G/H PCIe Gigabit Ethernet controllers
<b>COM</b>	Fintek F81865 Super I/O controller
<b>CAN</b>	2 MCP2518
<b>Expansion I/O</b>	2 miniPCIe slots (1 with PCIe + USB 2.0 signal, 1 with USB 2.0 signal only) 2 SIM card slots
<b>Front Panel I/O</b>	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
<b>Back Panel I/O</b>	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
<b>Power Supply</b>	9~30V DC-in (typical: 19W)
<b>Operating System</b>	Windows 10/8.1/8/7, Win 10 IoT, WES 7, Linux
<b>VIA Smart ETK</b>	BIOS flash tool, Wake-on LAN, keyboard power-on, Timer power-on, Power Management, Watchdog timer, GPIO
<b>Operating Temperature</b>	-20°C ~ 60°C with qualified industrial grade mSATA and DRAM
<b>Operating Humidity</b>	0% ~ 95% (relative humidity; non-condensing)
<b>Storage Temperature</b>	-20°C ~ 65°C
<b>Vibration Loading During Operation</b>	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

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

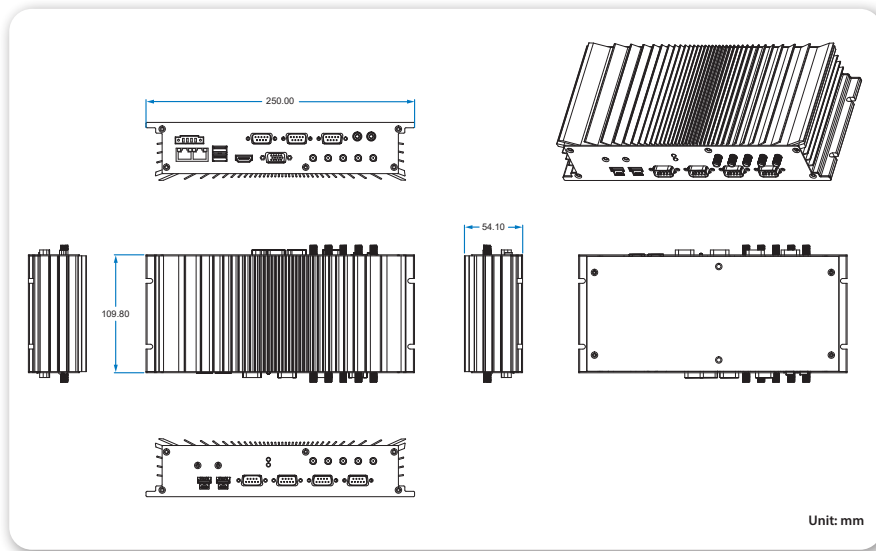
## Ordering Information

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 miniPCIe, 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 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
EMIO-2551-02A0	3.75G HSPA/UMTS mobile broadband full size miniPCIe module <b>(Europe only)</b>
EMIO-2551-03A0	3.75G HSPA/UMTS mobile broadband full size miniPCIe module with GPS <b>(Europe only)</b>
EMIO-2573-00A0	4G LTE mobile broadband full size miniPCIe module with assembly kit and antenna pack <b>(USA only)</b>
EMIO-2573-01A0	4G LTE mobile broadband full size miniPCIe module with assembly kit and antenna pack <b>(Europe only)</b>
EMIO-2573-02A0	4G LTE mobile broadband full size miniPCIe 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 miniPCIe & mSATA modules
- 2 thermal pads for mSATA module & heatsink
- Screw pack for mounting
- Rubber feet pack