VIA
AMOS-3006

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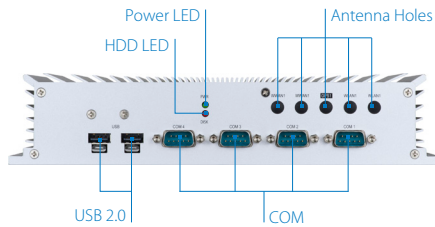

Features

■ 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

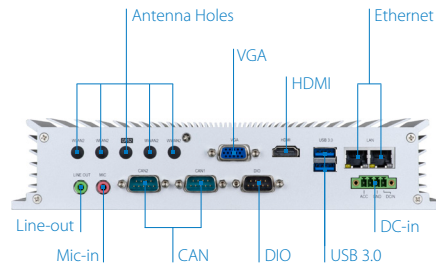■ Integrated power module supporting wide voltage range and smart power management for vehicles

CE FC

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/H 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℃ ~ 60℃ with qualified indsutrial grade mSATA and DRAM
Operating Humidity	0% ~ 95% (relative humidity; non-condensing)
Storage Temperature	-20℃ ~ 65℃
Vibration Loading During Operation	With mSATA Flash Drive: 3Grms, IEC 60068-2-64, random, 5 ~ 500Hz, 1hr/axis

Front Panel External I/O

Power LED
HDD LED
Antenna Holes
USB 2.0
COM

Back Panel External I/O

Antenna Holes
VGA
HDMI
Ethernet
Line-out
Mic-in
CAN
DIO
USB 3.0
DC-in

Specifications

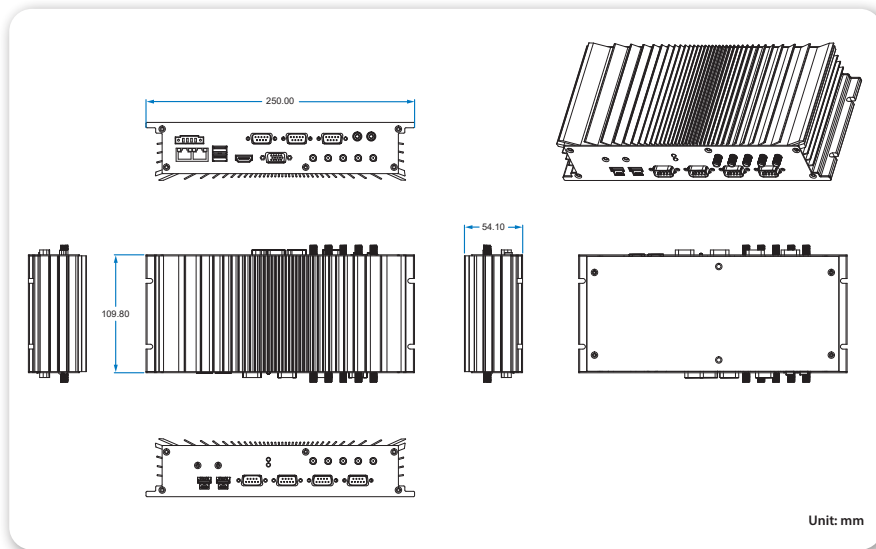| Model Name	AMOS-3006
Shock During Operation	With mSATA Flash Drive: 50G, IEC 60068-2-27, half sine, 11ms duration
Mechanical Construction	Aluminum top chassis housing Metal chassis housing Dual removable front & rear metal face plates
Mounting	Wall/DIN Rail/VESA mountable
Dimensions	250mm(W) x 54.1mm(H) 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 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 **(Europe only)**
EMIO-2551-03A0	3.75G HSPA/UMTS mobile broadband full size miniPCIe module with GPS **(Europe only)**
EMIO-2573-00A0	4G LTE mobile broadband full size miniPCIe module with assembly kit and antenna pack **(USA only)**
EMIO-2573-01A0	4G LTE mobile broadband full size miniPCIe module with assembly kit and antenna pack **(Europe only)**
EMIO-2573-02A0	4G LTE mobile broadband full size miniPCIe module with assembly kit and antenna pack **(Japan only)**

Dimensions

250.00

109.80

54.10

Unit: mm

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