

## AMOS Series

NEW

VIA

# AMOS-3002

Ultra Compact Fanless  
Embedded System for Pico-  
ITX Board



## Features

- Fanless, ultra compact size and supports EPIA embedded board for space and environment critical applications
- Wide range operation temperature from -10°C up to 60°C
- Supports optional wireless communication modules of GPRS/HSXPA/WCDMA or WLAN
- Rich I/Os include lockable USB, VGA, HDMI, GLAN, RS-232/422/485, GPIO, Audio
- Multiple mounting solution: wall/table/VESA mountable
- Embedded OS ready platform

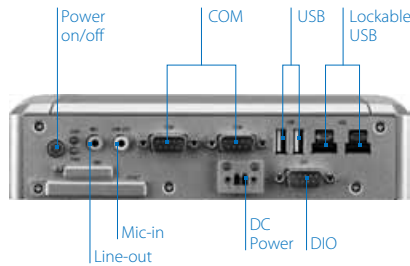
## Specifications

Model	AMOS-3002-1D10A1	AMOS-3002-2D10A1
<b>Computing System</b>	<b>Processor</b>	1.0GHz VIA Eden™ X2
	<b>Front Side Bus</b>	800 MHz
	<b>L2 Cache</b>	2MB
	<b>Chipset</b>	VIA VX900H Media System Processor
	<b>BIOS</b>	AMI 8MBit SPI Flash BIOS
	<b>System Power Management</b>	Wake-on LAN, keyboard power-on, timer power-on system power management, AC power failure recovery watch dog timer control
	<b>Memory</b>	<b>Technology</b>
	<b>Max. Capacity</b>	Up to 4GB memory size
<b>Graphic</b>	<b>Controller</b>	Integrated VIA Chrome 9™ HD DX9 3D/2D video processor with MPEG-2, WMV9/VC1, H.264 video decoding acceleration
	<b>Display Memory</b>	Optimized Unified Memory Architecture (UMA) Supports up to 512 MB frame buffer using system memory
	<b>CRT Interface</b>	Supports 1 x External VGA port by a DB-9 connector Pixel resolution support up to 2560 x 1600
	<b>HDMI® Interface</b>	Onboard 1 of HDMI port connector
	<b>Dual View</b>	Dual independent display of CRT + HDMI at different resolutions, pixel depths, and refresh rates
<b>Gigabit Ethernet</b>	<b>Controller</b>	Built-in dual VIA VT6130 Gigabit Ethernet controller
	<b>Interface</b>	Supports dual RJ45 connectors
<b>HD Audio</b>	<b>Controller</b>	VIA VT2021 High Definition Audio Codec
	<b>Interface</b>	Supports 2 x 3.5Φ audio jack as Line-out and Mic-in
<b>Serial</b>	<b>USB</b>	Supports 6 x USB ports, USB 2.0 compliant In the 6 USB ports, of which the two are used lockable USB interface connector for secure connection
	<b>Serial Ports</b>	2 x COM ports of 1 x RS-232 and 1x RS-232/422/485 (jumper selectable)
<b>GPIO</b>	<b>General Purpose I/O</b>	Supports 1 x D-Sub 9-pin connector of 8-bit GPIO + 5V power source (4GPI+4GPO)
<b>Storage</b>	<b>Flash Interface</b>	Supports 1 x CFast Flash disk socket as default
	<b>HDD</b>	N/A
<b>System Indicator</b>	<b>HDD Activity LED</b>	1 x Red color LED
	<b>Power Status LED</b>	1 x Green color LED

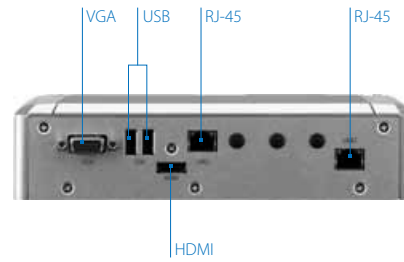
CE FC



## Front System IO



## Rear System IO



## Specifications

Model		AMOS-3002-1D10A1	AMOS-3002-2D10A1
Watch Dog Timer	<b>Output</b>	System reset	
	<b>Interval</b>	Programmable 1~255 sec	
Expansion	<b>Mini PCIe</b>	1 x MiniPCIe slot	
	<b>SIM</b>	1 x SIM slot	
Front Panel External I/O Connectors	<b>Dual COM</b>	2 x D-Sub 9-pin connectors of 1 x RS-232 and 1x RS-232/422/485	
	<b>Dual USB 2.0</b>	2 x USB ports of min-DIN connectors	
	<b>Dual Lockable USB</b>	2 x Lockable USB ports for secure connection	
	<b>Audio Line-out</b>	1 x 3.5Φ audio jack as Line-out	
	<b>Audio Mic-in</b>	1 x 3.5Φ audio jack as Mic-in	
	<b>Digital I/O</b>	Reserved cutout to support 1 x D-Sub 9-pin connector, support 8-bit digital I/O + 5V power source (4GPI+4GPO)	
	<b>CFast</b>	1 x CFast flash disk slot	
Rear Panel External I/O Connectors	<b>SIM</b>	1 x SIM slot	
	<b>VGA</b>	1 x D-Sub 15-pin female connector	
	<b>Dual USB 2.0</b>	2 x USB ports of min-DIN connectors	
	<b>Gigabit LAN</b>	2 x RJ45 connectors of Gigabit Ethernet LAN ports	
	<b>HDMI</b>	1 x HDMI connector	
Power Supply	<b>Input Voltage</b>	Accepts power input of DC 12V Typical power input 12VDC@1.8 A	
	<b>Power Input Connector</b>	DC power input connector by 2-pole phoenix connector	
	<b>Fuse Rating</b>	7A @ 125V	
Mechanical	<b>Construction</b>	Aluminum top chassis housing Metal chassis housing Dual removable front & rear metal face plate	
	<b>Mounting</b>	Wall/table/VESA mountable	
	<b>Dimensions</b>	197mm (W) x 49mm (H) x 104mm (D)	
	<b>Weight</b>	1.4 kg (3.08lbs) ( for P/N: AMOS-3002-1D10A1)	
	Environmental Specification	<b>Operation Temperature</b>	-20 °C up to 60°C for 1.0GHz VIA Eden™ X2 processor
<b>Storage Temperature</b>		-20 °C ~ 70 °C	
<b>Relative Humidity</b>		0 ~ 90% @ 45 °C, non-condensing	
<b>Vibration Loading During Operation</b>		With CFast Flash disk: 5Grms, IEC 60068-2-64, random, 5 ~ 500Hz, 1 Oct./min, 1hr/axis	
<b>Shock During Operation</b>		With CFast Flash disk: 50G, IEC 60068-2-27, half size, 11ms duration	
<b>EMC Approved</b>		CE, FCC Class A , CCC	
<b>Software Compatibility</b>		<b>Operation System</b>	Microsoft Windows XP, Windows 7, Windows Embedded Standard, Windows Embedded Standard 7, Linux

## Ordering Information

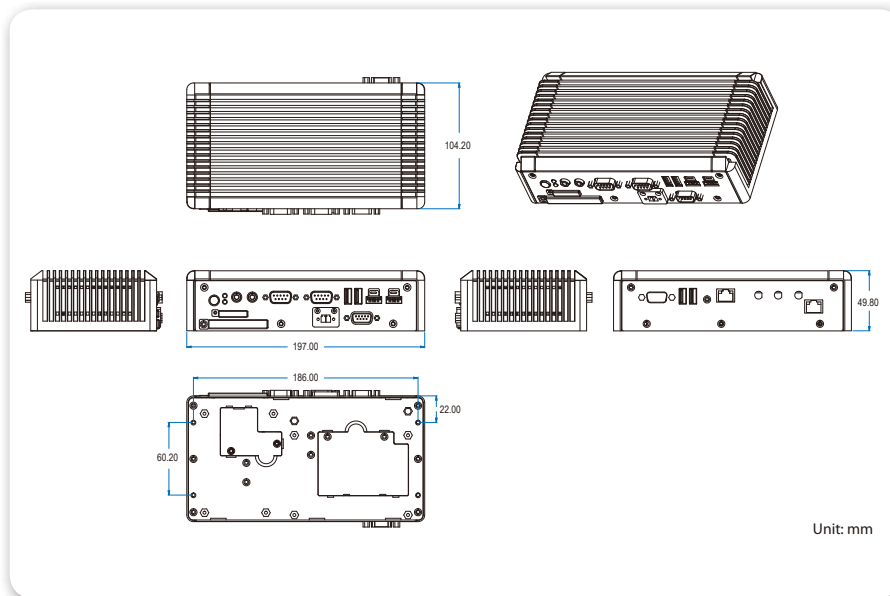
Part Number	System Built-in CPU	Description
AMOS-3002-1D10A1	1.0GHz Eden™ X2	1.0GHz Eden™ X2 CPU Based Fanless Embedded System with 1 x CFast Socket, VGA, HDMI, 4 x USB 2.0, 2 x Lockable USB, 2 x COM, 2 x GigaLAN, 1 x Line-out, 1 x MIC-in, 1 x GPIO, DC-in 12V
AMOS-3002-2D10A1	1.0GHz Eden™ X2	1.0GHz Eden™ X2 CPU Based Fanless Embedded System with 1 x Hard Disk Drive Bay, 1 x CFast Socket, VGA, HDMI, 4 x USB 2.0, 2 x Lockable USB, 2 x COM, 2 x GigaLAN, 1 x Line-out, 1 x MIC-in, 1 x GPIO, DC-in 12V

## Optional Accessories

### External AC-to-DC Adapter and Power Cable

Part Number	Description
99G63-020216	Power adapter input 100V-240V; output 12V, 60W, with 2-pin phoenix connector, pitch=3.81mm
99G63-020316	Power adapter input 100V-240V; output 12V, 60W, with 2-pin phoenix connector, pitch=3.81mm
99G33-02032C	Power cord, 180 cm, USA type
99G33-02033C	Power cord, 180 cm, Europe type
99G33-02031C	Power cord, 180 cm, UK type

## Dimensions



## Packing List

1 x AMOS-3002 unit
1 x VESA bracket
2 x Wall mount brackets
1 x Power cable, 2-pole phoenix plug to DC-Jack
1 x Thermal pad for memory
1 x Thermal pad for CFAST
4 x Bottom washer rubber
1 x HDMI to DVI-D adapter cable