

# VIA AMOS-825

Fanless ultra-compact quad-core ARM system ruggedized for demanding transportation environments



## Features

- 1.0GHz NXP i.MX 6Quad Cortex-A9 SoC
- Intelligent vehicle power management: ACC/IGN on/off delay & power protection
- Legacy I/O support including dual CAN bus, COM, and GPIO
- Built-in Wi-Fi, Bluetooth and GPS
- Android solution pack available

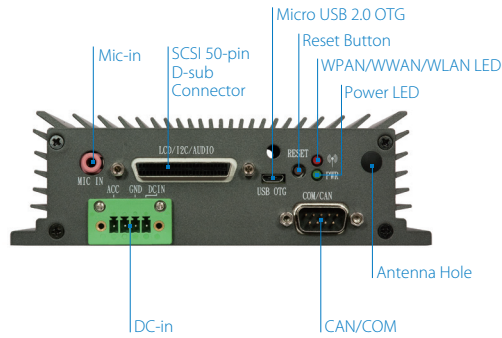


## Specifications

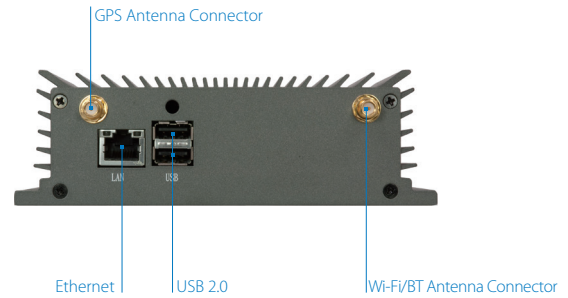
<b>Model Name</b>	<b>AMOS-825</b>
<b>Processor</b>	1.0GHz NXP i.MX 6Quad Cortex-A9 SoC
<b>System Memory</b>	1GB DDR3 SDRAM onboard
<b>Storage</b>	16GB eMMC Flash memory
<b>Boot Loader</b>	4MB SPI Flash ROM
<b>Graphics</b>	Vivante GC2000 GPU 3 independent, integrated 3D/2D and video graphics processing units Graphics engine supporting OpenGL® ES 2.0, OpenCL and OpenVG™ 1.1 hardware acceleration Supports MPEG-2, VC-1 and H.264 video decoding up to 1080p Supports SD encoding
<b>LAN</b>	Micrel KSZ9031RNX Gigabit Ethernet transceiver with RGMII support
<b>Wi-Fi/Bluetooth/GPS</b>	IEEE 802.11b/g/n Wi-Fi Bluetooth 4.0 MAX-7 u-blox 7 GPS/GNSS
<b>Audio</b>	NXP SGT5000 low power stereo codec
<b>USB</b>	SMSC USB2514 USB 2.0 high-speed 4-port hub controllers
<b>CAN</b>	TI SN65HVD1050 EMC optimized CAN transceiver
<b>Expansion I/O</b>	1 miniPCIe slot
<b>Front Panel I/O</b>	1 Micro USB 2.0 OTG port 1 9-pin D-sub connector (supports 2 CAN bus and 1 COM TX/RX for debug) 1 SCSI 50-pin D-sub connector (Backlight power, Dual-channel LVDS, 4 GPIO, I <sup>2</sup> C, Line-out and Mic-in) 1 Mic-in 1 Reset button 2 LEDs for power & WPAN/WWAN/WLAN status 1 Antenna hole 1 4-pole Phoenix DC jack
<b>Back Panel I/O</b>	2 USB 2.0 ports 1 Gigabit Ethernet port 2 Antenna connectors for Wi-Fi/BT and GPS
<b>Power Supply</b>	9 ~ 36V DC-in (typical: 7W)
<b>Operating System</b>	Android 6.0
<b>VIA Smart ETK</b>	Watchdog timer, CAN bus
<b>Operating Temperature</b>	0°C ~ 60°C
<b>Operating Humidity</b>	0% ~ 90% @ 45° C (non-condensing)
<b>Vibration Loading During Operation</b>	With onboard eMMC 7Grms, IEC 60068-2-64, random, 5 ~ 500Hz, 1hr/axis
<b>Shock During Operation</b>	With onboard eMMC 70G, IEC 60068-2-27, half sine, 11ms duration
<b>Bottom Opening Covers</b>	Open window with removable door plate to access Micro SD and miniPCIe slots
<b>Mechanical Construction</b>	Aluminum top chassis housing Metal chassis housing Dual removable front & rear metal face plate
<b>Mounting</b>	Wall/DIN Rail/VESA mountable



## Front Panel External I/O



## Back Panel External I/O



## Specifications

<b>Model Name</b>	<b>AMOS-825</b>
<b>Dimensions</b>	150.5mm(W) x 48.1mm(H) x 103.3mm(D) (5.9" x 1.9" x 4.1")
<b>Weight</b>	0.673kg (1.48lbs)
<b>Compliance</b>	CE, FCC

## Ordering Information

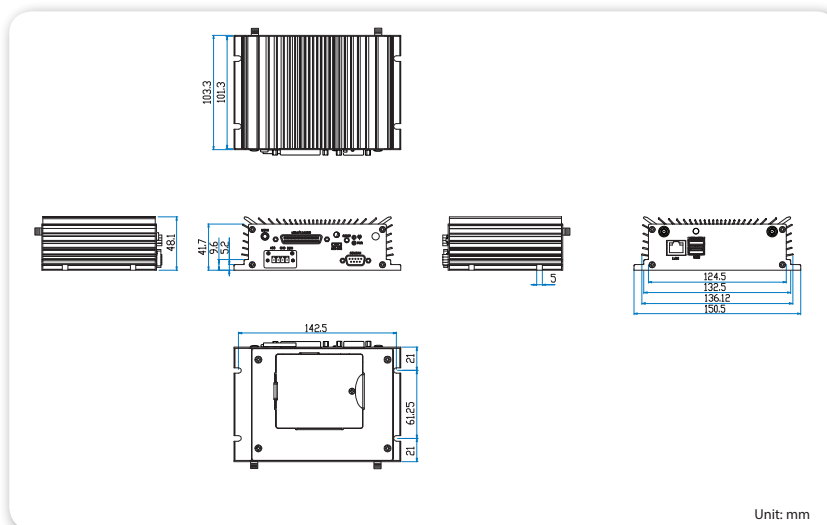
Part Number	SoC Frequency	Description
AMOS-825-1Q10A2	NXP i.MX 6Quad Cortex-A9 SoC @ 1.0GHz	Fanless embedded system with 1.0GHz NXP i.MX 6Quad Cortex-A9 SoC, 1GB DDR3 RAM, 16GB eMMC, 4MB SPI Flash ROM, SCSI 50-pin D-sub connector, 2 USB 2.0, Micro USB 2.0 OTG, COM, CAN bus, GPIO, Gigabit Ethernet, Wi-Fi, Bluetooth 4.0, GPS, miniPCIe slot, Micro SD card slot, 9~36V DC-in

## Optional Accessories

Touch Monitors	
Part Number	Description
99G73-010229	7" Projective capacitive touch monitor (800x480, -20°C ~ 70°C)

Wireless Accessories	
Part Number	Description
EMIO-2550-00A1	3.75G HSPA/UMTS mobile broadband full-size miniPCIe module with GPS, SIM card slot, assembly kit and antenna (*Note: GPS function is not supported - AMOS-825 already includes GPS support)

## Dimensions



## Packing List

Items
AMOS-825 system
Phoenix plug to DC jack
COM/CAN conversion cable
Wi-Fi/BT antenna
GPS antenna
SCSI 50-pin connector cable
Screw pack for mounting
Rubber feet pack