

## VIA AMOS-825

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

### Features

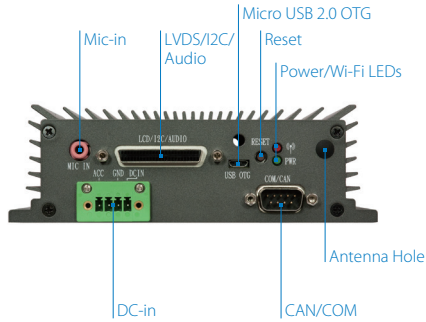
- 1.0GHz NXP i.MX 6Quad Cortex-A9 quad-core SoC
- Wide operating temperature range, 0°C ~ 60°C
- Legacy I/O support including dual CAN bus, COM, and GPIO
- Android solution pack available



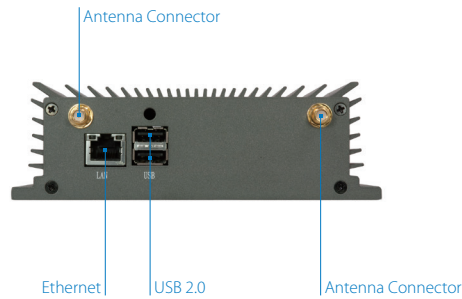
### Specifications

<b>Model Name</b>	<b>AMOS-825</b>
<b>Processor</b>	1.0GHz NXP i.MX 6Quad Cortex-A9 quad-core 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 802.11BGN 1T1R & BT4.0 combo USB module MAX-7 u-blox 7 GPS/GNSS module
<b>Audio</b>	NXP SGTL5000 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 1 CAN Bus and 1 COM TX/RX for debug) 1 SCSI 50-pin D-sub connector (Backlight power, Dual-channel LVDS, 4 GPIO, I2C, Line out and MIC-in) 1 MIC-in 1 Reset button 1 Power & WPAN/WWAN/WLAN LED 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 4.4.2
<b>Watchdog Timer</b>	Integrated watch dog timer supports two comparison points. Each comparison point can interrupt ARM core, 2nd comparison point capable of generating external interrupts on WDOG line.
<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 size, 11ms duration

### Front Panel External I/O



### Back Panel External I/O



### 7" Projective Capacitive Touch Monitor



## Specifications

<b>Model Name</b>	AMOS-825
<b>Bottom Opening Covers</b>	Open window with removable door plate to access Micro SD and miniPCIe slots
<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

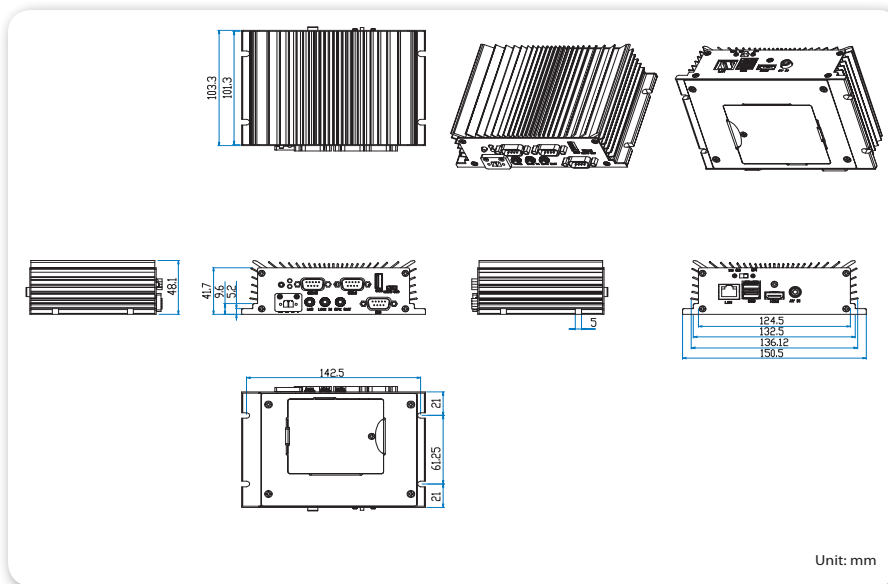
## Ordering Information

Part Number	SoC Frequency	Description
AMOS-825-1Q10A1	NXP i.MX 6Quad Cortex-A9 quad-core SoC @ 1.0GHz	Fanless embedded system with 1.0GHz NXP i.MX 6Quad Cortex-A9 SoC, 12GB DDR3 RAM, 16GB eMMC, 4MB SPI Flash ROM, 2 USB 2.0, Micro USB 2.0 OTG port, CAN bus, COM, SCSI 50-pin D-sub connector, GPIO, Gigabit Ethernet, miniPCIe slot, Micro SD card slot, 9~36V DC-in

## Optional Accessories

Part Number	Description
99G73-010229	7" Projective capacitive touch monitor (800 x 480, -20°C ~ 70°C)

## Dimensions



## Packing List

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