

VIA

AMOS-825

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

Features

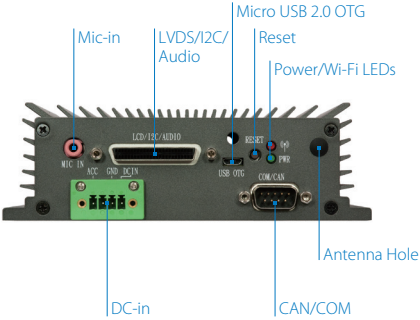
- 1.0GHz NXP i.MX 6Quad Cortex-A9 quad-core SoC
- Wide operating temperature range, 0°C ~ 60°C
- Legacy I/O support including dual CAN bus, COM, and GPIO
- Android solution pack available



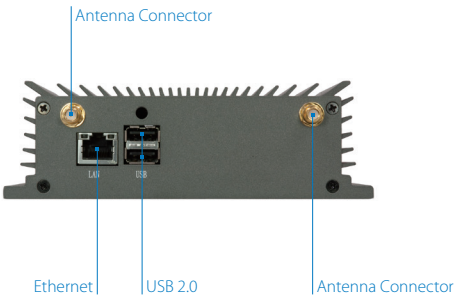
Specifications

Model Name	AMOS-825
Processor	1.0GHz NXP i.MX 6Quad Cortex-A9 quad-core SoC
System Memory	1GB DDR3 SDRAM onboard
Storage	16GB eMMC Flash memory
Boot Loader	4MB SPI Flash ROM
Graphics	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
LAN	Micrel KSZ9031RX Gigabit Ethernet transceiver with RGMII support
Wi-Fi/Bluetooth/GPS	IEEE 802.11BGN 1T1R & BT4.0 combo USB module MAX-7 u-blox 7 GPS/GNSS module
Audio	NXP SGT5000 low power stereo codec
USB	SMSC USB2514 USB 2.0 high speed 4-port hub controllers
CAN	TI SN65HVD1050 EMC optimized CAN transceiver
Expansion I/O	1 miniPCIe slot
Front Panel I/O	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
Back Panel I/O	2 USB 2.0 ports 1 Gigabit Ethernet port 2 Antenna connectors for Wi-Fi/BT and GPS
Power Supply	9 ~ 36V DC-in (typical: 7W)
Operating System	Android 4.4.2
Watchdog Timer	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.
Operating Temperature	0°C ~ 60°C
Operating Humidity	0% ~ 90% @ 45° C (non-condensing)
Vibration Loading during Operation	With onboard eMMC 7Grms, IEC 60068-2-64, random, 5 ~ 500Hz, 1hr/axis
Shock During Operation	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

Model Name	AMOS-825
Bottom Opening Covers	Open window with removable door plate to access Micro SD and miniPCIe slots
Dimensions	150.5mm(W) x 48.1mm(H) x 103.3mm(D) (5.9" x 1.9" x 4.1")
Weight	0.673kg (1.48lbs)
Compliance	CE, FCC

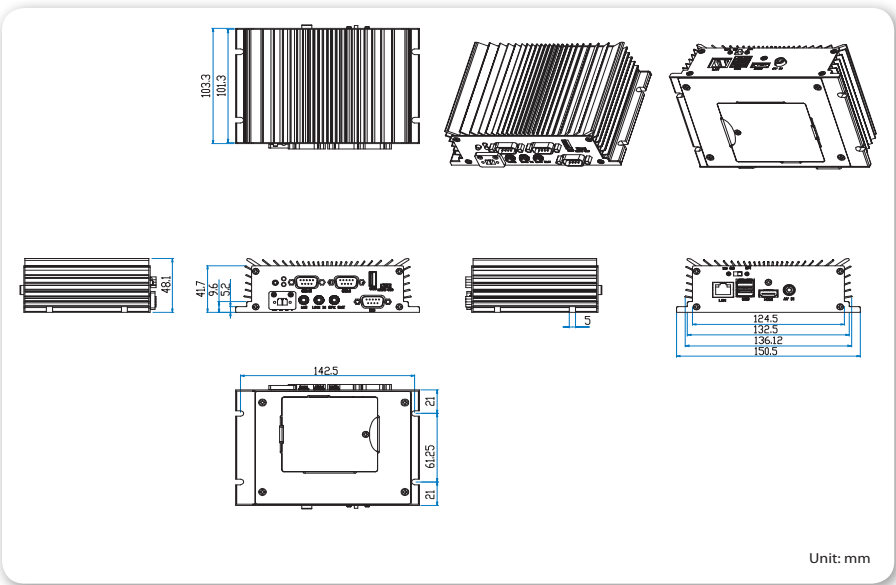
Ordering Information

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[VIA Technologies:](#)

[AMOS-825-1Q10A1](#) [7 in Panel with PCAP](#)