

VIA

ARTiGO A820

Fanless low-profile gateway system with dual Ethernet and wireless connectivity options for enterprise IoT and M2M applications

Features

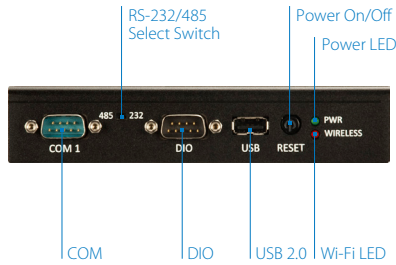
- Fanless and ultra slim low profile (only 3cm height)
- Powered by Freescale™ i.MX 6DualLite Cortex-A9
- Supports integrated graphics processing (GPU) for 3D/2D graphics acceleration
- Dual Ethernet support and wireless connectivity options available
- Linux BSP and customization services available



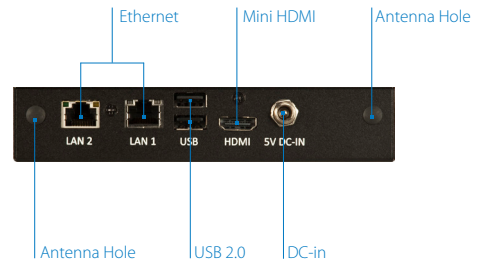
Specifications

Model Name	ARTiGO A820
Processor	1.0GHz Freescale™ i.MX 6DualLite ARM Cortex-A9
System Memory	1GB DDR3 SDRAM onboard
Storage	4GB eMMC Flash memory Micro SD Card
Graphics	Vivante GC880 2 Independent, integrated 3D/2D graphics processing units Graphics engine support OpenGL® ES 2.0, OpenVG 1.1 hardware acceleration Support MPEG-2, VC-1 video decoding up to 1080p
LAN	Micrel KSZ9031RNX Gigabit Ethernet Transceiver with RGMII support ASIX AX88772 USB2.0 to 10/100Mbps Fast Ethernet Controller
HDMI	Integrated HDMI 1.4 transmitter
USB	SMSC USB2514 USB 2.0 High Speed 4-port hub controller
Expansion I/O	1 miniPCle slot
Front Panel I/O	1 USB 2.0 port 1 DIO port supports 8 GPIO (4 GPI+4 GPO) 1 COM port for RS232/485 supports 8-wire DTE mode with isolation feature 1 RS232/485 select switch for COM port 1 Reset button 1 Power & Wi-Fi LED
Back Panel I/O	1 Mini HDMI port 2 USB 2.0 ports 1 Gigabit Ethernet port 1 10/100Mbps Ethernet port 2 Antenna holes for 3G or Wi-Fi 1 DC-in jack power input connector
Bottom Panel I/O	1 miniPCle slot 1 Micro SD card slot 1 Micro SD/SPI boot switch
Watchdog Timer	Integrated watchdog timer supports two comparison points. Each comparison point can interrupt ARM core, 2nd comparison point capable of generating external interrupts on WDOG line
Power Supply	5V DC-in (Typical: 6.7W)
Operating System	Linux Kernel 3.0.35
Operating Temperature	0°C to 50°C
Operating Humidity	0% ~ 90% @ 45°C (non-condensing)
Storage Temperature	-10°C ~60°C @ 90% (non-condensing)
Vibration Loading During Operation	With onboard eMMC 5Grms, IEC 60068-2-64, random, 5 ~ 500Hz, 1hr/axis
Shock During Operation	With onboard eMMC 50G, IEC 60068-2-27, half size, 11ms duration
Dimensions	150mm (W) x 30mm (H) x 125.5mm (D) (5.91" x 1.18" x 4.94")
Weight	0.566kg (1.25lbs)
Mounting	VESA Mount (100mm x 100mm) (Optional)

Front Panel External I/O



Rear Panel External I/O



Specifications

Model Name	ARTiGO A820
Mechanical Construction	Aluminum top cover Metal chassis housing
Compliance	CE/FCC

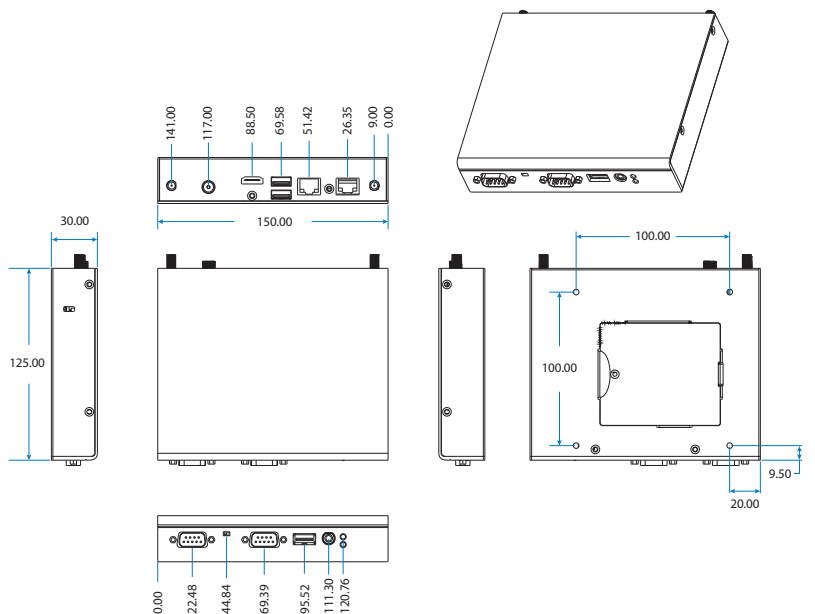
Ordering Information

Part Number	SoC Frequency	Description
ATG-A820-3D10A1	Freescale™ i.MX 6DualLite Cortex-A9 dual-core @ 1.0GHz	Fanless embedded system with 1.0GHz Freescale™ i.MX 6DualLite Cortex-A9 Soc, 1GB DDR3 RAM, 4GB EMMC, Mini HDMI, 3 USB 2.0, COM, DIO, Gigabit Ethernet, 10/100Mbps Ethernet, Micro SD Card, miniPCIe, 5V DC-in

Optional Accessories

Wireless Accessories	
Part Number	Description
00GO27100BU2B00D0	VNT9271BU0DB IEEE 802.11 b/g/n USB Wi-Fi dongle
EMIO-1541-00A1	VNT9485 IEEE 802.11 b/g/n miniPCIe Wi-Fi module with assembly kit and antenna
EMIO-2550-00A1	3.75G HSPA/UMTS Mobile broadband full size miniPCIe module with GPS and SIM card slot

Dimensions



Unit: mm

Packing List

- ARTiGO A820 system
- AC-to-DC adapter
- COM cable
- Power cord (USA type)
- Rubber feet
- Screw pack for miniPCIe card