



Avalon

Typical applications include:

- Terminal Emulation
- Lightweight Desktop Environment
- Thin Client
- Industrial Command & Control

- **Integrated Server Platform**
COTS Peripheral Interfacing (Keyboard and Monitor)
Embedded Power Supply
Linux operating system
- **Available Ports:**
2 USB 2.0
2 Ethernet 10/100
1 DVI-I
1 Serial RS-422 DB25F
- **MTBF greater than 600,000 hours**
Fanless design
SD Card (no hard drive)



Avalon

The Sunhillo Avalon product is a robust embedded computer system designed specifically for use in environments requiring low maintenance and high reliability in a small 6.5in(L) X 8.5in (W) X 1.9in (H) form factor. Avalon is based on a proven, commercially-available ARM CortexA8 processor design which allows users to take advantage of the Open Source software and hardware community to improve supportability and long-term sustainability; embedded Linux distributions are supported.

Avalon provides two (2) USB ports, two (2) 10/100 Ethernet ports, (1) one DVI-I port, and (1) one RS-422 Async serial port. The two (2) USB 2.0 ports support keyboards and other USB devices and can be disabled or enabled through configuration commands. A low-power ARM Cortex-A8 processor boots the system and application in less than 45 seconds and provides a robust development platform for software and hardware maintenance. Avalon features a DVI-I port for both analog and digital video transmission, which allows use of a variety of monitors; video resolution of 1024x768 and all modes for VT-100 emulation are supported. The DB25F connector uses a built-in RS-422 native asynchronous port; no external 422 adapters.

The Avalon's compact form factor allows for a variety of mounting options including desktop vertical, horizontal, or VESA mount. The Avalon Server was specifically designed to meet the VESA Flat Display Mounting Interface Standard for 12" to 22.9" diagonal flat displays. Monitor mounting Avalon is implemented in a way that allows for uniform directional flow for all attached cables, creating a less cluttered workspace and more prudent cable management, especially where space is at a premium.



422 Serial and DVI-I Interface

Technical Specifications:

Avalon System Interface Characteristics				
Serial Port Controls	Ethernet	Protocols	Video Output	Mounting Options
RS-422	10BASE-T 100BASE-T IEEE-802.3	Asynchronous	DVI-I	Desktop Horizontal Mount Desktop Vertical Mount Monitor Mount (With Optional Bracket)

Specifications	Inches	Metric	Power Requirements	Specification
Height	1.90 in.	48 mm	North America - 85/265 VAC	47-67Hz 2A max
Width	8.50 in.	216 mm		Fuse 250v / 2a Slow Blow
Depth	6.50 in.	165 mm		

Description	Specifications	Standard Achieved
Low Temperature Operating	50°F (10°C), uncontrolled humidity	MIL-STD-810F – Method 502.4
High Temperature Operating	104°F (40°C), uncontrolled humidity	MIL-STD-810F – Method 501.4
Temperature Storage	-58°F to 140°F (-50°C to 60°C)	MIL-STD-810F – Method 502.4
Humidity Operating - Non Condensing	Realitive Humidity 10% to 80% - Non Condensing	MIL-STD-810F – Method 507.4
Humidity Non-Operating	86°F to 133°F, 95% Humidity (30°C to 56°C, 95% Humidity)	MIL-STD-810F – Method 507.4
Altitude Operating	Low Pressure (Altitude) Operating/Air Carriage -200 to +10,000 feet	MIL-STD-810F – Method 500.4
Altitude Non-Operating	Low Pressure (Altitude) Storage/Air Transport +50,000 feet	MIL-STD-810F – Method 500.4
EMC Compliance	Federal Communications Commission (FCC)	Part 15, Class B
Safety Compliance	Underwriters Laboratories	(UL) 60950
Environmental Compliance	RoHS (Restriction of Hazardous Substance)	EU Directive 2002/95/EC

Product Overview:



Dual Ethernet & USB

Serial 422 Interface

DVI-I Interface