Midi-Aries

DIAMOND SYSTEMS

Midi-Aries Computers

The MIDI-Aries series is based on our rugged, I/O-rich **Aries SBC**. This board features the Intel "Bay Trail" E3845 CPU with an extensive set of PC I/O such as dual gigabit Ethernet, 4 multiprotocol RS-232/422/485 serial ports, and 2 USB 2.0 ports. The PC/104-Plus and PCIe MiniCard sockets enable easy I/O expansion with hundreds of I/O modules. Expansion is made easier with the prefab connector cutouts hidden behind a removable panel along the lower front edge.

MIDI-Aries systems are available with an embedded Ubuntu Linux or Windows Embedded 7 Standard OS programmed on the internal flashdisk at a nominal additional charge. Windows 7 orders include the appropriate Windows license.

Key Feature List (refer to **Aries SBC** product page for more detailed information)

SBC	Aries ARS3845-4GA or ARS3845-4GN
Processor	Intel "Bay Trail" E3845 1.91GHz quad core Atom
Memory	4GB
Ethernet	2x 10/100/1000 – Intel I219 / I210
Serial ports	4x RS-232/422/485, software configurable protocol and termination
USB ports	2x 2.0 (additional 1x 3.0 port available with custom front panel)
Display	VGA (HDMI available with custom front panel)
Data acquisition	Optional 16 16-bit A/D 250KHz, 4 16-bit D/A with waveform generator
Digital I/O	22 (A models), 16 (N models)
Mass storage	32GB SSD standard; 256GB max
Operating system	Ubuntu 16.04 LTS Windows Embedded Standard 7
Input voltage	5VDC (-01 models), 7-34VDC (-02 models)
I/O expansion	PC/104-Plus (PCI + ISA) up to 2 modules for -01 models, 1 module for -02 models 1x PCIe / USB Minicard full-size socket

Operating temperature	-40 to +85°C fanless	
Dimensions	183mm W x 140mm D x 81mm H	
Mounting methods	Integrated rubber feet Wall mount bracket kit DIN rail kit	

Model	Data Acquisition	Input Voltage
MIDI-ARS45A-01	Yes	5VDC
MIDI-ARS45A-02	Yes	7-34VDC
MIDI-ARS45N-01	No	5VDC
MIDI-ARS45N-02	No	7-34VDC