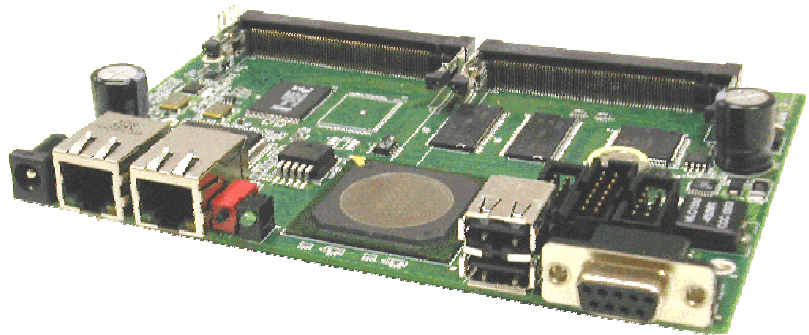


A full featured four-channel Intel® XScale® IXP425/533MHz processor for enterprise and residential network applications

The GW2348-4 is a member of the Gateworks Avila Network Processor family. The GW2348-4 meets the requirements for enterprise and residential network applications. This single board network processor consists of an Intel® IXP425 XScale® processor operating at 533MHz, 64Mbytes of SDRAM, and 16Mbytes of Flash. Peripherals include four Type III Mini-PCI sockets, two 10/100 Base-TX Ethernet channels, Compact Flash socket, and two RS-232 serial ports for management and debug. Additional features include digital I/O, serial EEPROM, real time clock, voltage and temperature monitor, fan controller, watchdog timer, passive power over Ethernet, wide input voltage range high power DC/DC power supply, and extended temperature operation. Software support includes Linux and VxWorks® operating systems.

FEATURES

- ◆ Intel® XScale® IXP425 533MHz Processor
- ◆ 64Mbytes SDRAM
- ◆ 16Mbytes Flash
- ◆ Four Type III Mini-PCI Sockets
- ◆ Two 10/100 Base-TX Ethernet Ports
- ◆ Compact Flash Socket
- ◆ Two RS-232 Serial Ports
- ◆ General Purpose Digital I/O
- ◆ 1Kbyte Serial EEPROM
- ◆ Battery Powered Real Time Clock
- ◆ Voltage and Temperature Monitor
- ◆ Thermally Activated Fan Controller
- ◆ Watchdog Timer
- ◆ User LED and Pushbutton Reset
- ◆ Optional Dual Type A USB Host Ports
- ◆ Passive Power Over Ethernet
- ◆ Reverse Voltage and Transient Protection
- ◆ 9 to 48VDC Input Voltage Range
- ◆ 18W Shared Between Mini-PCI Sockets
- ◆ 5W Typical Operating Power
- ◆ -40°C to 85°C Operating Temperature
- ◆ Software Support for Linux and VxWorks
- ◆ 1 Year Warranty
- ◆ See Ordering Options for Other Configurations



SPECIFICATIONS

ELECTRICAL

Input Voltage:

- ▼ 9 to 48VDC

Operating Current:

- ▼ 0.2A Typical @ 24VDC

MECHANICAL

Dimensions:

- ▼ 4.0in x 6.0in x 1.2in (102mm x 152mm x 30mm)

Weight:

- ▼ 5 oz (142g)

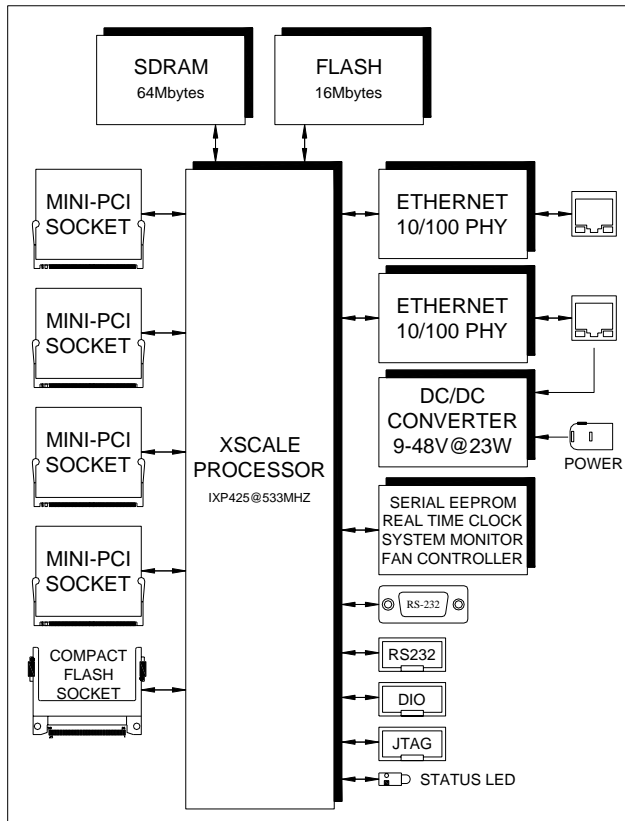
ENVIRONMENTAL

Operating Parameters:

- ▼ Temperature: -40°C to +85°C
- ▼ Humidity (non-condensing): 20% to 90%

Storage Parameters:

- ▼ Temperature: -40°C to +85°C
- ▼ Humidity (non-condensing): 5% to 95%



Avila GW2348-4 Functional Diagram

ORDERING OPTIONS

Standard Configuration

GW2348-4

- ▼ IXP425 CPU @ 533MHz
- ▼ 64Mbytes SDRAM
- ▼ 16Mbytes Flash
- ▼ Four Type III Mini-PCI Slots

Development Kit

GW2348-DEVKIT

- ▼ Redboot Boot Loader v2.01
- ▼ Parallel Port JTAG Programmer and Software
- ▼ Serial Console Cables
- ▼ Ethernet Patch Cable
- ▼ Wall Power Supply
- ▼ Ethernet Power Injector

Other Configurations

The GW2348 can be customized for high volume applications by changing the features listed below. Contact the factory for additional information.

- ▼ Intel IXP42x processor type and speed
- ▼ SDRAM from 32Mbytes to 128Mbytes
- ▼ Flash from 4Mbytes to 32Mbytes
- ▼ Adding and removing peripherals
- ▼ Operating temperature range

	Size	Mini-PCI Sites	Ethernet Ports	Host USB	Operating Temperature	Operating Voltage
GW2347	4" x 4"	1	1	No	0 to 70°C	6-20VDC
GW2345	4" x 6"	4	5	No	0 to 70°C	6-28VDC
GW2348-2	4" x 6"	2	2	No	0 to 70°C	9-48VDC
GW2348-4	4" x 6"	4	2	Optional	-40 to 85°C	9-48VDC

Other configurations of each product are possible. Contact factory for more information.

Avila Family Major Feature Comparison