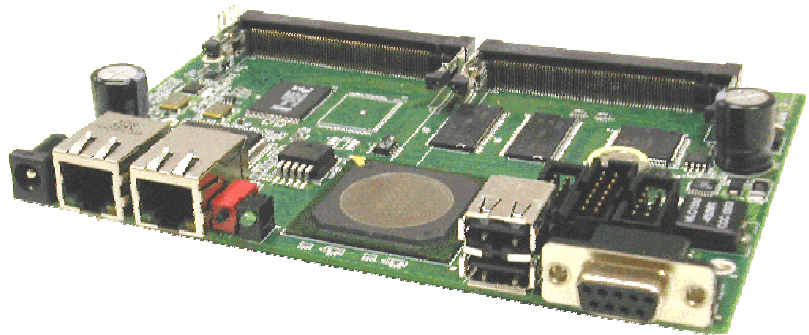


## *A wide voltage, extended temperature Intel® XScale® IXP425 processor for enterprise and residential network applications*

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 RS232 serial ports for management and debug. Additional features include serial EEPROM, real time clock, voltage and temperature monitor, fan controller, watchdog timer, passive power over Ethernet, digital I/O, 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 (with Auto MDI/MDIX)
- ◆ Compact Flash Socket
- ◆ Two RS232 Serial Ports
- ◆ 1Kbyte Serial EEPROM
- ◆ Battery Powered Real Time Clock
- ◆ Voltage and Temperature Monitor
- ◆ Thermally Activated Fan Controller
- ◆ Watchdog Timer
- ◆ 5-bits General Purpose Digital I/O
- ◆ User LED and Pushbutton Reset
- ◆ Optional Dual Type A USB Host Ports
- ◆ Passive Power Over Ethernet
- ◆ 9 to 48VDC Input Voltage Range
- ◆ Reverse Voltage and Transient Protection
- ◆ 18W Available for 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)

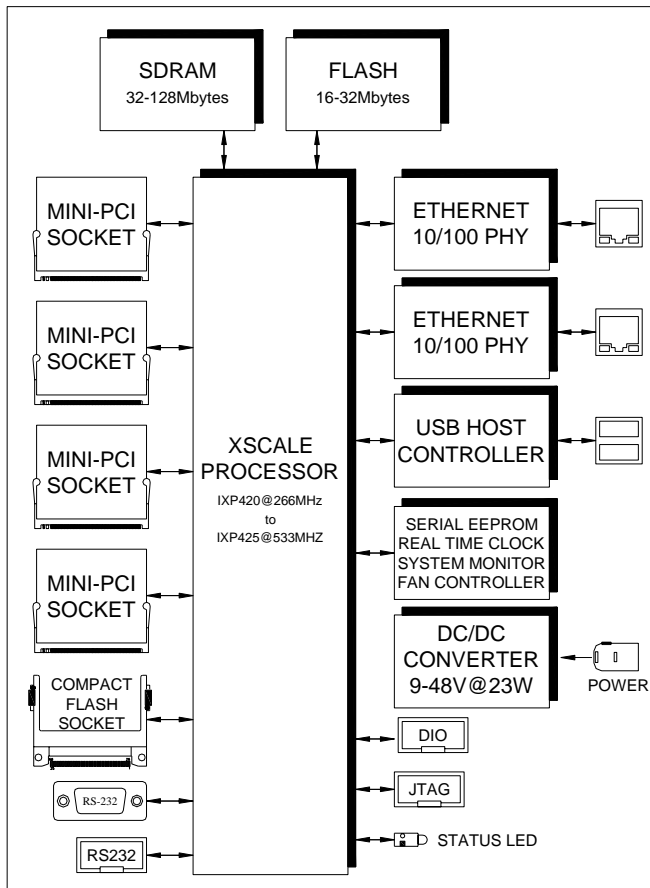
#### ENVIRONMENTAL

**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%



## 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

**Avila GW2348-4 Functional Diagram**

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