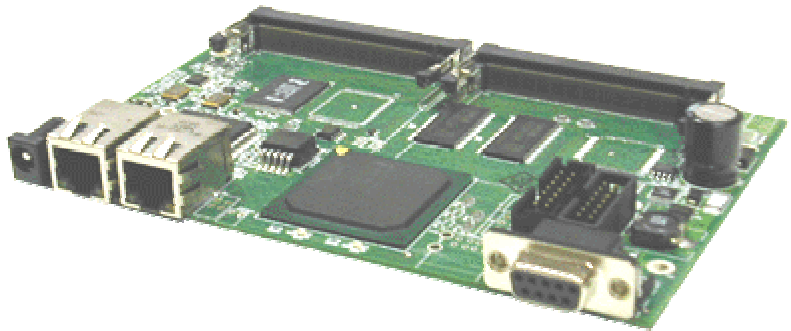**GATEWORKS**
CORPORATION

An Intel® XScale® IXP420/266MHz processor for enterprise and residential network applications

The GW2348-2 is a member of the Gateworks Avila Network Processor family. The GW2348-2 meets the requirements for enterprise and residential network applications. This single board network processor consists of an Intel® IXP420 XScale® processor operating at 266MHz, 32Mbytes of SDRAM, and 8Mbytes of Flash. Peripherals include two Type III Mini-PCI sockets, two 10/100 Base-TX Ethernet channels, and an RS232 serial ports for management and debug. Additional features include serial EEPROM, voltage and temperature monitor, watchdog timer, passive power over Ethernet, digital I/O, and a wide input voltage range high power DC/DC power supply. Software support includes Linux and VxWorks® operating systems.

FEATURES

- ♦ **Intel® XScale® IXP420 266MHz Processor**
- ♦ **32Mbytes SDRAM**
- ♦ **8Mbytes Flash**
- ♦ **Two Type III Mini-PCI Sockets**
- ♦ **Two 10/100 Base-TX Ethernet Ports (with Auto MDI/MDIX)**
- ♦ **RS232 Serial Port**
- ♦ **1Kbyte Serial EEPROM**
- ♦ **Voltage and Temperature Monitor**
- ♦ **Watchdog Timer**
- ♦ **5-bits General Purpose Digital I/O**
- ♦ **Passive Power Over Ethernet**
- ♦ **9 to 48VDC Input Voltage Range**
- ♦ **Reverse Voltage and Transient Protection**
- ♦ **9W Shared Between Mini-PCI Sockets**
- ♦ **3W Typical Operating Power**
- ♦ **0°C to 70°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:
- ▼ 0.13A Typical @ 24VDC

MECHANICAL

Dimensions:
- ▼ 4.0in x 6.0in x 1.2in (102mm x 152mm x 30mm)
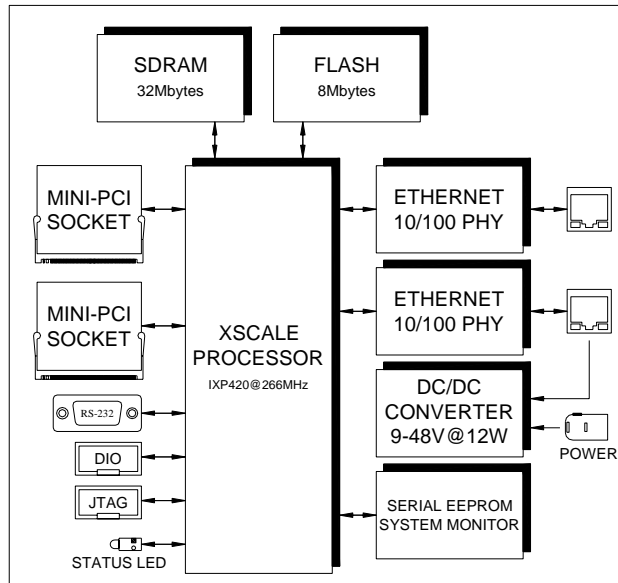
Weight:
- ▼ 5 oz (142g)

ENVIRONMENTAL

Operating Parameters:
- ▼ Temperature: 0°C to +70°C
- ▼ Humidity (non-condensing): 20% to 90%

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

Avila GW2348-2 Functional Diagram

ORDERING OPTIONS

Standard Configuration
GW2348-2
- IXP420 CPU @ 266MHz
- 32Mbytes SDRAM
- 8Mbytes Flash
- Two 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