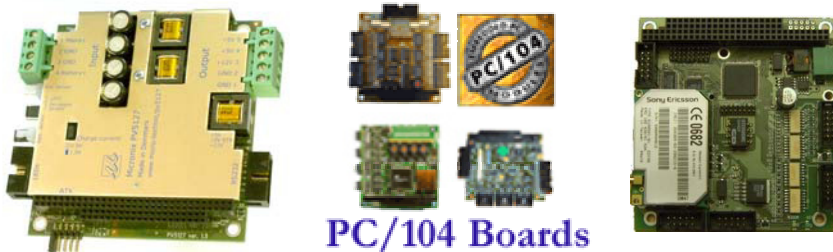




**MICRONIX PC/104 EXPANSION BOARDS**  
*- for industrial control systems and mobile applications*

## Short-form catalogue

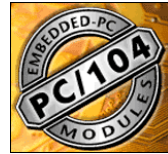


PC/104 Boards

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## About PC/104 products

During the 1980s a demand for a compact implementation of the PC bus, satisfying the reduced space and power constraints of embedded control applications emerged. Yet these goals had to be realised without sacrificing full hardware and software compatibility with the popular PC bus standard. This would allow the PC s hardware, software, development tools, and system design knowledge to be fully leveraged.

The PC/104 standard was developed in response to this need by Ampro Computers in 1987. It offers full architecture, hardware, and software compatibility with the PC bus, but in ultra-compact (96x90x16 mm) stackable modules. The modules can be stacked via a standardised PC/104 stackable bus connector having 104 pins. PC/104 is therefore ideally suited to the unique requirements of embedded control applications.

This feature provides a very rugged and expandable solution – a basic need for any machine control designs. Today more than 200 vendors worldwide supply hardware based on the PC/104 standard, and both supply and demand is increasing by 20 percent per year according to a survey made by VDC. Further information on the PC/104 standard (IEEE-P996) can be found at [www.pc104.org](http://www.pc104.org)

## Expansion boards for the PC/104 bus

*Micronix PC/104 modules are a line of European manufactured expansion boards for the PC/104 bus. Micronix PC/104 represents a comprehensive line of GSM/GPRS modems, serial communication interfaces, power supply modules, digital I/O and data acquisition boards.*

*All boards are designed for industrial and process control systems and for vehicular/automotive applications.*

*All Micronix PC/104 boards can be supplied with drivers for Windows 2000, XP (Embedded) and Linux.*

*Further information on our boards can be found online on our website: [www.micro-technic.com/pc104](http://www.micro-technic.com/pc104)*



## Digital I/O boards

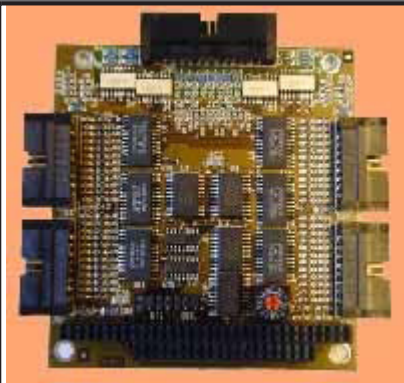


**Online Information :**  
[www.micro-technic.com/pv1608](http://www.micro-technic.com/pv1608)

### ***Micronix PV-1608:***

Opto-isolated I/O board with 16 digital inputs and 8 digital high-power outputs:

- 16 digital inputs, 10-30V, Opto-isolated
- 8 digital outputs, 1.5A, Opto-isolated
- Drives available for Linux & Win NT/2000/XP systems
- PNP or NPN outputs
- Extended temperature rating: -20 to +70° C

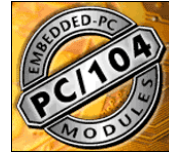


**Online Information :**  
[www.micro-technic.com/pv1648](http://www.micro-technic.com/pv1648)

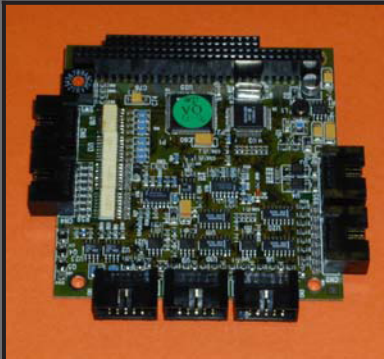
### ***Micronix PV-1648:***

64 channel I/O board with 16 digital inputs and 48 digital outputs:

- 16 digital inputs, 10-30V, Opto-isolated
- 48 digital outputs, 100 mA
- Drives available for Linux & Win NT/2000/XP systems
- NPN or optional TTL outputs
- Extended temperature rating: -20 to +70° C



## Data acquisition boards



**Online Information :**

[www.micro-technic.com/pv2019](http://www.micro-technic.com/pv2019)

**Micronix PV-2019:**  
**12-bit Data Acquisition board:**

- 16 analogue voltage inputs
- 8 analogue current inputs
- 2 analogue outputs (voltage and/or current)
- 8 digital inputs, 10-30V, opto-isolated
- 8 digital outputs, 100 mA, opto-isolated
- 2 counter inputs
- Microprocessor based auto calibrating system
- Drives available for Linux & Win NT/2000/XP systems
- Extended temperature rating: -20 to +70° C

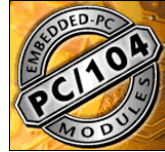


**Online Information :**

[www.micro-technic.com/pv2019](http://www.micro-technic.com/pv2019)

**Micronix PV-2019A:**  
**12-bit Data Acquisition board:**

- 8 analogue voltage inputs
- 8 digital inputs, 10-30V, opto-isolated
- 8 digital outputs, 100 mA, opto-isolated
- 2 counter inputs
- Microprocessor based auto calibrating system
- Drives available for Linux & Win NT/2000/XP systems
- Extended temperature rating: -20 to +70° C



## Communication boards



**Online Information:**  
[www.micro-technic.com/pv-serial](http://www.micro-technic.com/pv-serial)

### **PV-4000-series** 4xRS/232 Ports serial communication:

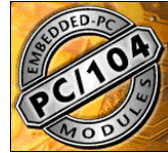
- 4 x RS232 ports
- Super high-speed versions up to 460 Kbps RS232 communication
- "+5V"-versions available
- Shared Interrupt supported
- Temperature rating: 0°C - +70°C



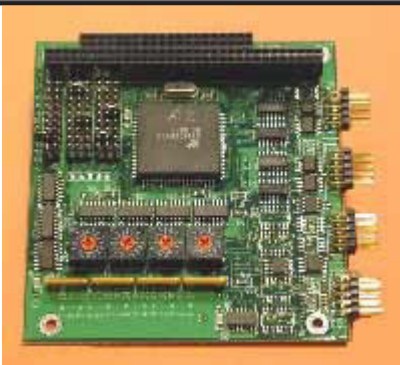
**Online Information:**  
[www.micro-technic.com/pv-serial](http://www.micro-technic.com/pv-serial)

### **PV-0310-series** 4xRS/485 Ports serial communication:

- 4 x RS485 ports
- Combined 2-wire and 4-wire RS485 ports
- Shared Interrupt supported
- Temperature rating: 0°C - +70°C



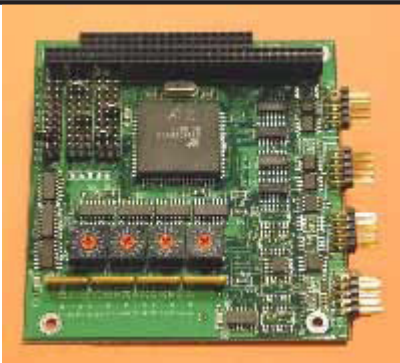
## Communication boards



**Online Information:**  
[www.micro-technic.com/pv-serial](http://www.micro-technic.com/pv-serial)

### **PV-2002-series** Combined serial communication: RS/232 & RS/422 Ports:

- 2 x RS232 ports
- 2 x RS422 ports
- Super high-speed versions up to 460 Kbps RS232 communication
- "+5V"-versions available
- Shared Interrupt supported
- Temperature rating: 0°C - +70°C



**Online Information:**  
[www.micro-technic.com/pv-serial](http://www.micro-technic.com/pv-serial)

### **PV-1000-series** Combined serial communication: RS/232, RS/422 & RS/485 Ports:

- 9 different versions of combined RS485, RS422 & RS232 ports
- Super high-speed versions up to 460 Kbps RS232 communication
- "+5V"-versions available
- Shared Interrupt supported
- Temperature rating: 0°C - +70°C



## Power supply boards

### 30W version with Flash & battery charger



**A complete PC/104 computer can be build from just one Micronix PV-5124/2 and one PC/104 CPU.**

**Online Information:**

[www.micro-technic.com/pv5124](http://www.micro-technic.com/pv5124)

#### **Micronix PV-5122/-24:** Power Supply with Flash SSD and integrated UPS

- Output voltages:
  - +5V @ 5A
  - +12V @ 250mA
  - 12V @ 100mA
- PV-5124: 3.84 MB SSD
- PV-5122: 1.76 MB SSD
- PV-5124/22 is a high efficiency DC to DC converter with 30 Watt output capability.
- UPS function with alarm outputs and "logic level" remote shutdown.
- Extended temperature rating: -20 to +70° C



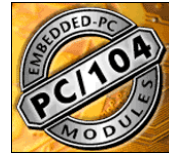
**Online Information:**

[www.micro-technic.com/pv5124](http://www.micro-technic.com/pv5124)

#### **Micronix PV-5120:** PC/104 Power Supply with integrated UPS

- Output voltages:
  - +5V @ 5A
  - +12V @ 250mA
  - 12V @ 100mA
- PV-5120 is a high efficiency DC to DC converter with 30 Watt output capability.
- UPS function with alarm outputs and "logic level" remote shutdown.
- Extended temperature rating: -20 to +70° C

## MICRONIX PC/104



### Power supply boards

#### 30W version, low-cost without charger



**Online Information :**

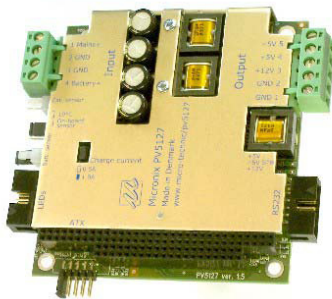
[www.micro-technic.com/pv5120a](http://www.micro-technic.com/pv5120a)

#### **Micronix PV-5120-A: PC/104 Power Supply**

- Output voltages:
  - +5V @ 5A
  - +12V @ 250mA
  - 12V @ 100mA
- PV-5120A is a high efficiency DC to DC converter with 30 Watt output capability.
- Extended temperature rating:
  - 20 to +70° C



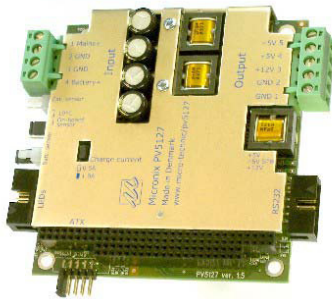
### 75W version with UPS/battery charger & ATX control



**Online Information :**  
[www.micro-technic.com/pv5127](http://www.micro-technic.com/pv5127)

#### **Micronix PV-5127:** PC/104 Power Supply

- Output voltages:
  - +5V @ 8A
  - +12V@ 3A
- PV-5127 is a high efficiency DC to DC converter with 75 Watt output capability.
- ATX control
- Battery charger supports:
  - NiMH (using Micronix PV-1075)
  - Sealed Lead-acid
- Built-in fan and heat control
- Extended temperature rating:
  - 20 to +70° C



**Online Information :**  
[www.micro-technic.com/pv5127](http://www.micro-technic.com/pv5127)

#### **Micronix PV-5127A:** PC/104 Power Supply

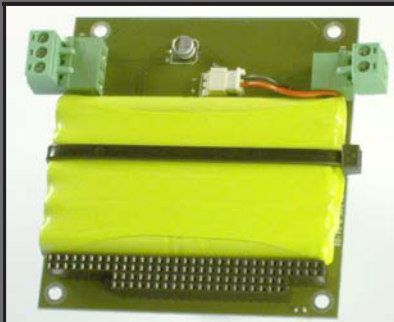
- Output voltages:
  - +5V @ 8A
  - +12V@ 3A
- PV-5127A is a high efficiency DC to DC converter with 75 Watt output capability.
- ATX control
- Built-in fan and heat control
- Extended temperature rating:
  - 20 to +70° C

## MICRONIX PC/104



### Battery Packs

#### NiMh Battery pack with built-in charger



**Online Information :**  
<http://www.micro-technic.com/pv1075>

#### **Micronix PV-1075:** PC/104 Battery Pack

- Nominal voltage: +12VDc
- Capacity: 500mAh
- Integrated charger
- Timer controlled battery protection
- Continuous discharge: <1500mA
- Standard charge: 50mA, 12hrs
- Extended temperature rating: -10 to +70° C (Discharge)

### GSM/GPRS Modem

#### GSM/GPRS modem with power supply and I/O channels



**Online Information :**  
<http://www.micro-technic.com/pv1800>

#### **Micronix PV-1800:** PC/104 GSM/GPRS modem

- 20 W power supply:
  - Input: 8-27V DC
  - Output: +5V@ 4A
- GSM/GPRS modem:
  - SIM card interface
  - RF output: 1W (1800MHz)
  - SMS & Data (14.4kbps)
- Analogue inputs (isolated):
  - 8 single or 4 differential
  - 12-Bit resolution
- Digital I/O, opto-isolated:
  - 8 Inputs, 0-24V
  - 7 outputs, 500mA output
- 1x RS232 port
- Extended temperature rating: -20 to +70° C



### GSM/GPRS modem with power supply



**Online Information :**  
<http://www.micro-technic.com/pv1800>

#### **Micronix PV-1830:** PC/104 GSM/GPRS modem

- 20 W power supply:
  - Input: 8-27V DC
  - Output: +5V@ 4A
- GSM/GPRS modem:
  - SIM card interface
  - RF output: 1W (1800MHz)
  - SMS & Data (14.4kbps)
- Extended temperature rating:  
-20 to +70° C



**Online Information :**  
<http://www.micro-technic.com/pv1800>

#### **Micronix PV-1830A:** PC/104 GSM/GPRS modem

- GSM/GPRS modem:
  - SIM card interface
  - RF output: 1W (1800MHz)
  - SMS & Data (14.4kbps)
- Extended temperature rating:  
-20 to +70° C

