

μPAC-7186EX-SM

Faster Ethernet μPAC



3

Palm - size PAC - μPAC



μPAC-7186EX-SM

μPAC-7186EXD-SM

Main Features

- 80186 (80MHz) CPU, 512K Flash, 640K SRAM
- Ethernet 10/100M Base-TX, RS-232 / RS-485
- OS: MiniOS7
- Support I/O expansion bus
- Remote maintenance via the Ethernet
- Modbus protocol to SCADA
Indusoft, DasyLab, Trace Mode, Citect, iFix...
- Easy use software development toolkits :
MiniOS7 Studio, Xserver, VxComm, Modbus Libs.



Comparison

| New Advantages | μPAC-7186EX-SM | I-7188EX |
|-----------------------------|----------------|-------------|
| More SRAM | 640K | 512K |
| Faster normal running speed | 2~4 times | 1 |
| More powerful CPU | 80186-80MHz | 80188-40MHz |
| Faster / powerful Ethernet | 10/100 Base-TX | 10 Base-T |
| More EEPROM | 16K | 2K |

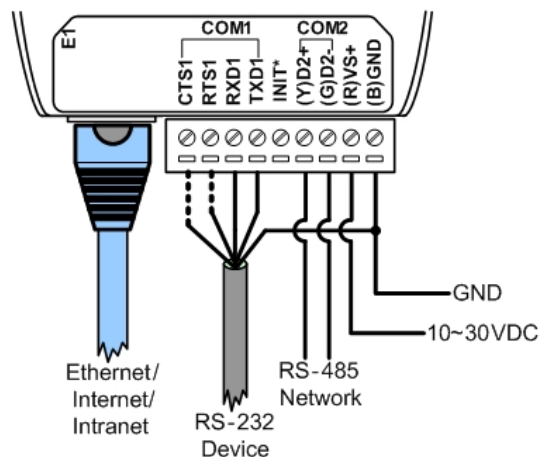
Features

- High reliability in harsh environment
- Embedded MiniOS7, anti-virus
- Built-in watchdog timer (WDT)
- Ethernet Protocols: TCP, UDP, IP, ICMP, ARP
- Faster 10/100M Ethernet port
- Modbus Protocols
- Free easy-to-use software development toolkits for your applications
- Expansion Bus Interface
- Remote / web Configuration/Maintenance
- Support for Virtual COM technology

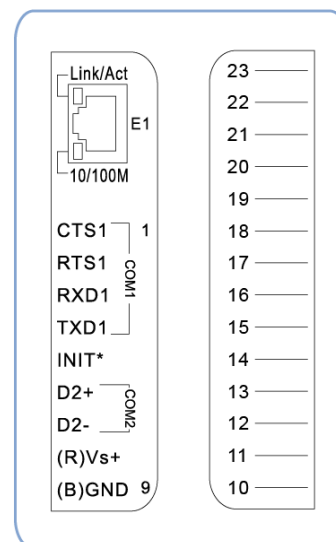
Expansion Board Selection Guide

| For: | X-Boards: | | | | | | |
|----------------------|-----------|------|------|------|----------|------|------|
| DI/O, photo mos, PWM | X107 | X109 | X110 | X111 | X116 | X119 | |
| A/D, D/A, DI/O | X202 | X203 | X303 | X304 | X305 | X308 | X310 |
| Prototype, Testing | X002 | X004 | X005 | X006 | | | |
| RS-232/485 | X503 | X504 | X505 | X506 | X511 | | |
| RS-232/485/422, DI/O | X507 | X508 | X509 | X510 | X510-128 | | X518 |
| Flash ROM | X600 | X601 | | | | | |
| Battery Backup SRAM | X607 | X608 | | | | | |
| Motion Control | X702 | X703 | | | | | |

Wiring



Pin Assignments



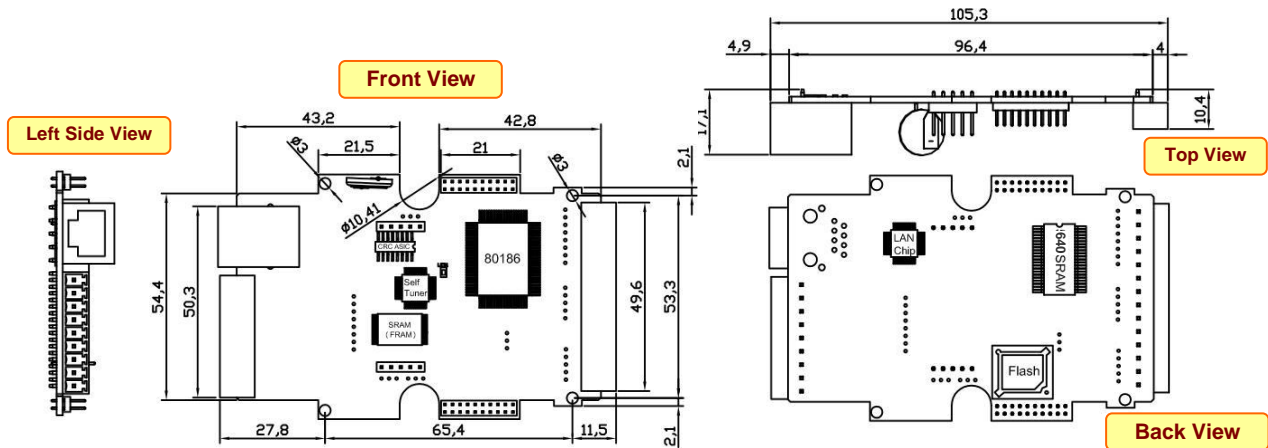
Specifications

Series : Palm-size PAC > μ PAC-7186 > 86E > 86EX

| PACs | μ PAC-7186EX-SM | μ PAC-7186EXD-SM |
|----------------------------------|---|----------------------|
| ■ CPU Specification | | |
| CPU | 80186-80M Hz | |
| SRAM | 640K Bytes | |
| Flash | 512K Bytes | |
| NAND Flash | -- | |
| FRAM | -- | |
| EEPROM | 16K Bytes | |
| NVRAM | 31 Bytes | |
| OS | MiniOS7 | |
| RTC | Yes | |
| 64-bit hardware serial number | Yes | |
| Watchdog Timer | Yes | |
| ■ Communication Interface | | |
| Ethernet Port | 10/100M Base-TX (Auto-negotiating, Auto_MDIX, LED indicator) | |
| COM1 | RS-232 (TXD, RXD, RTS, CTS, GND), Non-isolation, Speed: 115200 bps max | |
| COM2 | RS-485 (D2+, D2-, self-tuner ASIC inside); Non-isolation, Speed: 115200 bps max | |
| ■ LED Display | | |
| System LED | Yes, as power / communication Indicator | |
| 5-digit 7-segment LED Display | No | Yes |
| ■ Hardware Expansion | | |
| I/O Expansion Bus | Yes | |
| User Defined I/O Pins | 14 Pins | |
| ■ Operating Environment | | |
| Operating Temperature | -25° C to +75° C (-13° F to +167° F) | |
| Storage Temperature | -40° C to +80° C (-40° F to +176° F) | |
| Humidity | 5% to 90%, non-condensing | |
| ■ Power | | |
| Protection | Power reverse polarity protection | |
| Frame Ground | Yes (for ESD Protection) | |
| Required Supply Voltage | +10 VDC to +30 VDC (non-regulated) | |
| Power Consumption | 2 W | 3 W |
| ■ Green Status | | |
| RoHS | RoHS Compliance 2002/95/EC | |
| WEEE | WEEE Compliance | |
| ■ Dimensions | | |
| | 123 x 72 x 33 mm | |

PAC Views

Unit: mm



Ordering Information

| Model Number | Description |
|-----------------------------|---|
| μ PAC-7186EX-SM CR | 10/100M Ethernet μ PAC, 80186-80 CPU, 640K SRAM, 512K Flash (RoHS) |
| μ PAC-7186EXD-SM CR | 10/100M Ethernet μ PAC, 80186-80 CPU, 640K SRAM, 512K Flash (RoHS), LED display |
| Optional Accessories | |
| PWR-24/110 | Wall-plug power adaptor /110VAC, 60Hz, 3.6W |
| GPSU06U-6 | Wall-plug power Adapter / 100-240VAC, 50/60Hz, 6W |
| PWR-24/230 | Wall-plug power adaptor /220VAC, 50Hz, 3.6W |
| Expansion Boards | More than 50 X-boards are available, please check out the Expansion I/O guide |

3

Palm-size PAC - μ PAC

μ PAC 7186 EX

μ PAC 7186 EG

μ PAC 7186 XG

μ PAC 7186 XB

I-7188 E

I-7188 G

I-7188 X