CAN Series Products

CAN bus series Programmable Automation Controller

RoHS CE FC

μPAC-7186EXD-CAN

Dimensions

Back View Front View
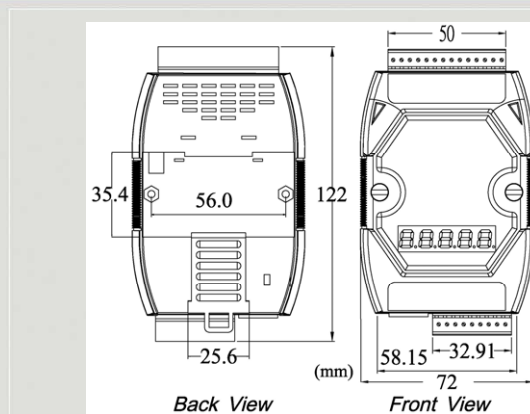
The μPAC-7186EXD-CAN PACs (programmable Automation controller) are powered by 80186-80 processor with 512 KB of static RAM, and 512 KB of Flash memory. All of them provide several communication interfaces to adapt to various applications, such as CAN port, RS-232 port, RS-485 port and Ethernet interface. Uses can program their application program flexibly with C/C++ language because of the built-in MiniOS7 operation system. It is useful for transfer the command from differential communication interface. Therefore, the μPAC-7186EXD-CAN series PACs are economic and convenient solution for diversification CAN application.

Features

- High reliability in harsh environment
- Embedded MiniOS7, anti-virus
- Supports a variety of TCP/IP features, including TCP, UDP, IP, ICMP, ARP
- 10/100BASE-T Ethernet controller
- Remote Configuration
- Support for Virtual COM configuration
- 1000 V_{DC} voltage protection on CAN side
- Compatible with CAN specification 2.0 parts A and B
- Programmable transfer rate up to 1 Mbps
- Jumper for 120 Ω terminal resistor for CAN channel
- 64-bit hardware unique serial number inside
- COM driver support interrupt & 1 KB QUEUE Input & Output buffer
- COM port: COM1, COM2
- Built-in RTC, NVRAM, EEPROM
- Built-in self-tuner ASIC controller on RS-485 port
- 7-segment LED display
- Program download port: COM1 or Ethernet Port (Available soon)
- Free easy-to-use software development toolkits
- Support the CAN bus instead of the X-bus, so it can not be add-on any X-board

Wiring and Pin Assignments
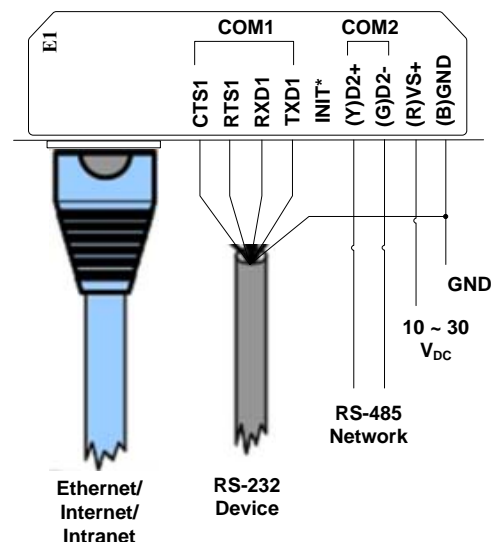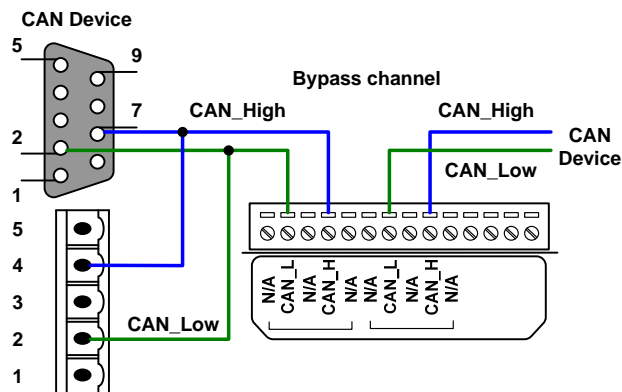
Hardware Specifications

Hardware	
CPU	80186, 80 MHz or compatible
SRAM/Flash/EEPROM	512 KB / 512 KB / 16 KB
NVRAM	31 bytes (battery backup, data valid for up to 10 years)
RTC (Real Time Clock)	Yes
CAN Interface	
Controller	NXP SJA1000T with 16 MHz clock
Transceiver	NXP 82C250
Channel number	1
Connector	5-pin screwed terminal block (CAN_L, CAN_H, N/A for others)
Baud Rate (bps)	10 k, 20 k, 50 k, 125 k, 250 k, 500 k, 800 k, 1 M (allow user-defined baud rate)
Isolation	1000 V_{DC} for DC-to-DC, 2500 Vrms for photo-couple
Terminal Resistor	Jumper for 120 Ω terminal resistor
Specification	ISO-11898-2, CAN 2.0A and CAN 2.0B
UART Interface	
COM 1	RS-232
COM 1 Connector	5-pin screwed terminal block (TxD, RxD, RTS, CTS, GND)
COM 2	RS-485 (Self-turner inside)
COM 2 Connector	2-pin screwed terminal block (DATA+, DATA-)
Baud Rate (bps)	110, 150, 300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200
Ethernet Interface	
Controller	10/100Base-TX Ethernet Controller (Auto-negotiating, Auto_MDIX)
Power	
Power supply	Unregulated +10 ~ +30 V_{DC}
Protection	Power reverse polarity protection, Over-voltage brown-out protection
Power Consumption	3 W
Mechanism	
Dimensions	72mm x 122mm x 33mm (W x L x H)
Environment	
Operating Temp.	-25 ~ 75 ℃
Storage Temp.	-30 ~ 80 ℃
Humidity	10 ~ 90% RH, non-condensing
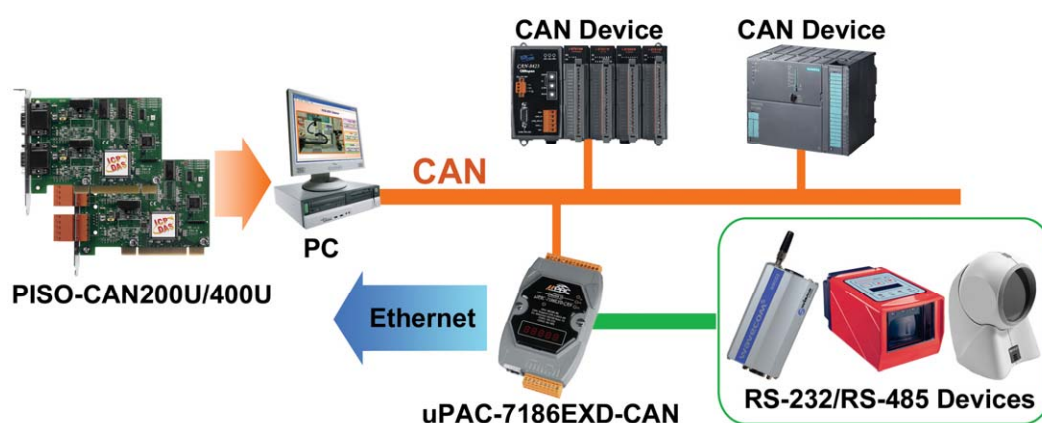
Ordering Information

μPAC-7186EXD-CAN	Programmable automation controller with two series communication port (RS-232/RS-485), one CAN port, one Ethernet port, 7-segment Display, 4 programmable LEDs, 512 KB flash ,512 KB SRAM, developing tool kit, Minios7.
μPAC-7186EXD-CAN CR	Programmable automation controller with two series communication port (RS-232/RS-485), one CAN port, one Ethernet port, 7-segment Display, 4 programmable LEDs, 512 KB flash ,512 KB SRAM, developing tool kit, Minios7. (RoHS)