**CPU / Memory**
- CPU: ATMEL 180MHz AT91RM9200 (ARM9, w/ MMU)
- Memory: 64MB SDRAM, 16MB NOR Flash

**Network Interface**
- Type: 2 x 10/100BaseT, RJ45 connector

**USB Ports**
- Host Ports: 2, USB 2.0 compliant, with 10-pin header
- Data Rate: Up to 12Mbps

**Mass Storage**
- 1 x SD 1.0 compliant socket inside

**High-precision Analog Input**
- A/D Converter: AD7712 (Analog Devices)
- No. of Channels: 4, multiplexed, differential
- Sampling Speed: 10 readings per second
- Input Range [selected by software]:
  - 0.1–0.5V, 0–5V, 0–10V, ±1V, ±5V, ±10V
- Resolution: 16-bit
- Accuracy: +/-0.1%
- Voltage Input Mode: Differential, 100db CMR
- Voltage Input Impedance: 20M Ohms
- Current Input Impedance: 120 Ohms
- Isolation Protection: 1500VDC

**Isolated Digital Input**
- No. of Channels: 8
- Logical High: 5–24VDC
- Logical Low: 0–1.5VDC
- Input Resistance: 1.2K ohms@0.5W
- Response Time: 20µs
- Opto-isolation: 2500Vrms

**Digital Output**
- No. of Channels: 8
- Source Driver: UDN2981A (Allegro MicroSystems)
- Source Voltage (VDD): 5–50VDC
- Output Current: 500mA max.

**S/W Specifications**

**General**
- OS: Linux, kernel 2.6.14
- Boot Loader: U-Boot 1.2
- File Systems: JFFS2, ETX2 / ETX3, VFAT / FAT, NFS

**Protocol Stacks**
- IPv4, ICMP, ARP, DHCP, NTP, TCP, UDP, FTP, TELNET, HTTP, PPP, PPPoE, CHAP, PAP, SMTP, SNMP V1 / V2, SSL, SSH 1.0 / 2.0

**Pre-installed Utilities**
- bash: shell command
- tinylogin: login and user manager utility
- telnet: telnet client program
- busybox: Linux utility collection
- ftp: ftp client program

**Daemons**
- pppd: dial in / out over serial port and PPPoE
- snmpd: SNMP agent program
- telnetd: telnet server program
- inetd: TCP server program
- ftpp: ftp server program
- boa: web server program
- sshd: secure shell server
- iptables: firewall service manager
- amgrd: Artila manager daemon

**Toolchain for Linux**
- GCC: C / C++ PC cross compiler for Linux, Cygwin
- GLIBC: POSIX Library

**Device Drivers**
- SD / MMC, UART, Real Time Clock, Buzzer, Digital I/O, Ethernet, Watchdog Timer

**USB Host Drivers (Could Be Customized)**
- Flash disk
- WIFI (IEEE-802.11b/g)
- RS-232 adapters

**Ordering Information**
- PAC-5070 Linux-based ARM9 Programmable Automation Controller
- CBL-F10M9-20 (91-0P9M9-001)
  - Console Cable (10Pin-Header to DB9 Male, 20cm)

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**H/W Specifications**

**CPU / Memory**
- CPU: ATMEL 180MHz AT91RM9200 (ARM9, w/ MMU)
- Memory: 64MB SDRAM, 16MB NOR Flash

**USB Ports**
- Host Ports: 2, USB 2.0 compliant, with 10-pin header
- Data Rate: Up to 12Mbps

**Mass Storage**
- 1 x SD 1.0 compliant socket inside

**High-precision Analog Input**
- A/D Converter: AD7712 (Analog Devices)
- No. of Channels: 4, multiplexed, differential
- Sampling Speed: 10 readings per second
- Input Range [selected by software]:
  - 0.1–0.5V, 0–5V, 0–10V, ±1V, ±5V, ±10V
- Resolution: 16-bit
- Accuracy: +/-0.1%
- Voltage Input Mode: Differential, 100db CMR
- Voltage Input Impedance: 20M Ohms
- Current Input Impedance: 120 Ohms
- Isolation Protection: 1500VDC

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**Features**

- Linux kernel 2.6.14 OS with file system
- 64MB SDRAM and 16MB NOR Flash
- 4 x 16-bit high precision multiplexed analog inputs
- 8 x 2500Vrms opto-isolated digital inputs
- 8 x 500mA High Drive digital outputs
- 2 x 1Gbps Ethernet ports
- 1 x RS-232 port, 1 x RS-485 port
- 2 x USB 2.0 host ports for add-on functionality expansion
- 1 x SD memory card slot included for storage expansion
- GNU C / C++ toolchain for Linux / Windows environment
- 9~40VDC input range