CoProcessor Module
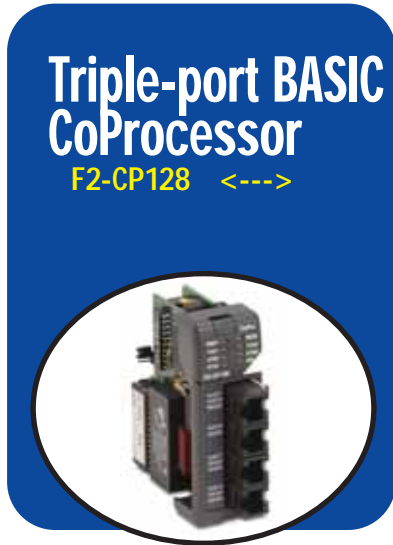

Triple-port BASIC CoProcessor
F2-CP128 <--->

Overview

The BASIC CoProcessor Module interfaces the DL205 family of programmable controllers with bar code readers, operator interface terminals, instrumentation equipment, computers and other serial devices.
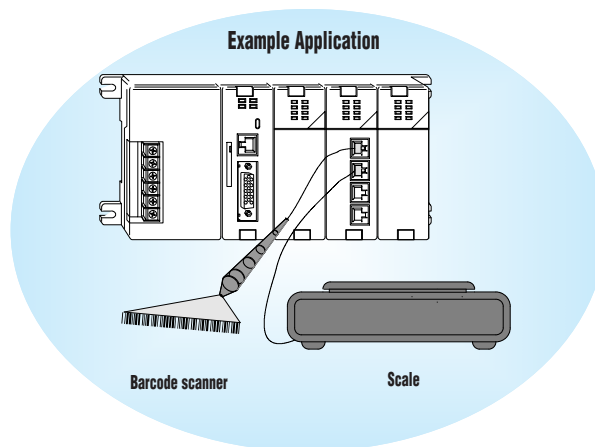
BASIC CoProcessor applications

BASIC CoProcessors are designed for use with intelligent devices such as:

- Bar code readers
- Welders
- Board level controllers
- Serial printers
- Intelligent sensors
- Almost any device with an RS-232/422/485 port

They are also good solutions for applications requiring complex math: such as, floating point math, sine, cosine, tangent, exponential, square roots, etc.

Features

- FACTS Extended BASIC and ABM Commander for Windows software for IBM PCs makes program development fast and simple. Allows online, full-screen BASIC program editing and the ability to upload / download programs on disk. The CD-ROM includes Modbus master and slave BASIC programs and other application examples.
- Non-volatile memory of up to 128K allows multiple program storage and execution, DL205 register expansion, and retentive data storage and retrieval.
- 26 MHz BASIC CoProcessor provides fast program execution independent of the CPU scan.
- Three buffered ports permit communication from the module to three external devices.
- The module is programmable from port 1 or 2 for complete serial port utilization without switching cables.
- A real-time clock/calendar maintains time/date with battery backup when power outages occur. Programmable time based BASIC interrupts to 0.010 of a second.
- Direct access of up to 254 bytes of DL205 CPU memory per scan is possible. No supporting ladder logic is required.
- Floating point math solves complex formulas to eight significant digits.

Example Application

Barcode scanner   **Scale**

BASIC CoProcessor

Triple Port BASIC CoProcessor Module Specification	
Module Type	CoProcessor, Intelligent
Modules per CPU	Seven maximum, any slot in CPU base (except slot zero)
Communication	256 character type-ahead input buffer on all ports. Ports are independently programmed by software. Seven or eight data bits, one or two stop bits, even, odd, or no parity. XON/XOFF software flow control and RTS/CTS handshake.
F2-CP128	128K bytes of battery-backed RAM. 26MHz clock rate Port 1: RS-232/422/485, 115.2 Kbaud maximum Port 2: RS-232/422/485, 57.6 Kbaud maximum Port3*: RS-232, 19.2 Kbaud max. *Port 3 physically located in the same RJ12 jack as Port 1 (RS-232). Port 3 uses the RTS/CTS pins on that jack. If you use these lines for other purposes (e.g. hardware handshaking on Port 1), then Port 3 cannot be used.*
ABM Commander for Windows (CD included with module)	Programming /documentation software for IBM PCs comes standard. Key features include: • Shipped with each coprocessor module • Runs under Windows 98/2000 • On-line full-screen BASIC program editing (similar to GW Basic, with industrial application enhancements added for easier programming) • Internal Editor for block copy, block move, search and replace • Text upload and download BASIC programs on disk • Binary upload and download BASIC programs and data on disk • Download control statement allows multiple programs to be downloaded and saved with one download file. • CD includes Modbus master and slave BASIC programs and other application examples
Field Termination	Four RJ12 jacks: Port 1/3 RS-232, Port 2 RS-232, Port 1 RS-422/485, Port 2 RS-422/485
Power Consumption	235 mA @ 5VDC
Operating Environment	0ºC - 60ºC (32ºF - 140ºF), 5% to 95% humidity (non-condensing)
Manufacturer	FACTS Engineering

PLC Overview

DL05/06 PLC

DL105 PLC

DL205 PLC

DL305 PLC

DL405 PLC

Field I/O

Software

C-more HMIs

Other HMI

AC Drives

Motors

Steppers/ Servos

Motor Controls

Proximity Sensors

Photo Sensors

Limit Switches

Encoders

Current Sensors

Pushbuttons/ Lights

Process

Relays/ Timers

Comm.

TB's & Wiring

Power

Circuit Protection

Enclosures

Appendix

Part Index