

## CAN-NET Development & Training Products

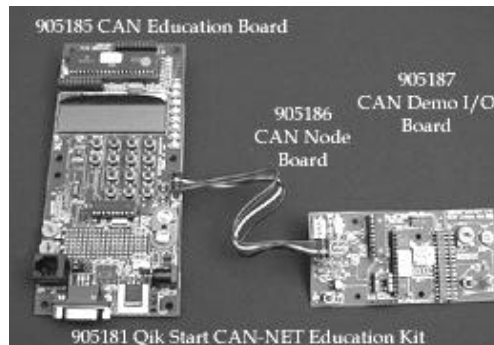
### CAN-NET Family Overview:

The CAN-NET family of products provides a platform to quickly begin using an operational CAN Network based on the MCP2510 CAN Controller from Microchip Technology. The core of the system is the CAN-NET Education Board. This flexible board has a CAN port and both RS-232 and RS-422 ports. It can act as a bridge between a PC and a CAN Network. We provide a Windows based CAN-NET monitor program which can be downloaded from our web site. To allow maximum flexibility we offer a variety of modular satellite nodes. Each node is comprised of a NODE Board which provides the CAN interface and one of 5 specialty boards which plug into the NODE Board.

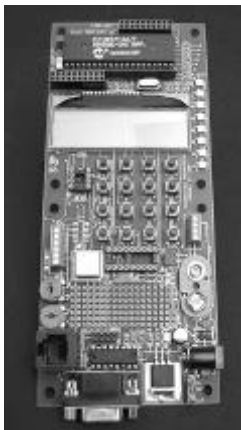
### P/N 905185

#### Qik Start CAN-NET Education Board

The Qik Start CAN-NET Education Board is an excellent tool for students or engineers working on CAN Network projects employing the MCP2510 CAN Controller. This module comes with operational software and is ready for immediate use. Included on the board is a keypad, 2 x 16 LCD, eight LED's, two potentiometers, and a bread-boarding area. This board can be powered from a Power Pak (905530) or a 9V battery.



A MCP2510 CAN Controller provides a flexible interface to a CAN Network. Along with the CAN port, the board includes an RS-232 and an RS-485 interface. The RS-232 port allows this board to act as a bridge between a PC and a CAN Network. A Windows based CAN-NET monitor program can be downloaded from our web site. A Microchip PIC16F874 microcontroller supplies the brains. An ICD (In Circuit Debugger) port allows for in-circuit programming and debugging of software when used with the ICD Module (905501). This board may be used as a stand-alone module or installed in our **Design Center** (905000).



### P/N 905180

#### Qik Start CAN-NET Education Kit

This kit contains one CAN-NET Education Board (905185), one CAN-NET Node Board (905186), and one CAN-NET I/O Board (905187). This combination provides 2 complete nodes that can communicate with each other. The system is operational out of the box. All software is provided and makes an excellent starting point for further development. (We recommend Power Pak (905530) and ICD Module (905501) be purchased also).

### P/N 905186

#### CAN-NET Node Board

Designed around the Microchip PIC16F873 microcontroller and MCP2510 CAN Controller, this board provides an interface between a CAN Network and any of our accessory I/O boards (see below). A CAN-NET Node Board is supplied with each accessory kit. The board comes complete with a pre-programmed PIC16F873 microcontroller. The included software supports a network of 5 boards. All source code is provided and can be modified to expand or customize your system.

### P/N 905190

#### CAN-NET Analog Input Node Kit

The CAN-NET Analog Input Node Kit combines a CAN - NET Analog Input Board with a CAN-NET Node Board. The CAN-NET Analog Input Board uses a Microchip MCP3201 12 bit Analog to Digital Converter to capture analog signals and passes the information on to the Node Board. The Node Board in turn packages this information and broadcasts it on the CAN Network. A pair of MCP602 Dual OP Amps are configured as an instrumentation amplifier followed by an active filter. The board includes a thermistor to easily demonstrate the features of the ADC. A pattern is also provided for an optional customer installed pressure transducer.

The kit includes:

- 1 CAN-NET Node Board (PN 905186)
- 1 CAN-NET Wiring Harness
- 1 CAN-NET Analog Input Board

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### P/N 905189

#### CAN-NET Analog Output Node Kit

CAN-NET Analog Output Node Kit combines a CAN-NET Analog Output board with a CAN-NET Node Board. Includes PWM outputs to drive the board mounted 10-position bar graph, or an external load up to 200ma. There is a feedback signal that can represent the current of the external load or the signal from the CDS photocell, which monitors the local incandescent lamp to easily illustrate a closed loop system.

The kit includes:

- 1 CAN-NET Node Board (PN 905186)
- 1 CAN-NET Wiring Harness
- 1 CAN-NET Analog Output Board with:
  - PWM Output converted to 0-5 Volt Output
  - Incandescent Lamp
  - PWM Output at 200ma
  - 10 position Bar Graph
  - CDS Photocell Analog Input
  - Current Feedback Analog Input

### P/N 905191

#### CAN-NET Prototype Board

The CAN-NET Prototype Board provides developers an array of .040" holes on a .1"x.1" grid for circuit development. This board plugs into the Node Board. There is a local regulated 5V power supply.

### 905187

#### CAN-NET I/O Board

The CAN-NET I/O Board plugs into the Node Board and provides digital and analog inputs and outputs. The board is used to demonstrate the CAN NET system by providing sources and destinations for analog and digital signals. Analog inputs include a potentiometer and CDS photocell. The analog output is an incandescent lamp. The digital signals are in the form of one switch and one LED. This board is available alone (905187) or combined in a kit with a CAN-NET Node Board.

### P/N 905188

#### CAN-NET LCD Node Kit

The CAN-NET LCD Board plugs into a CAN-NET Node Board and provides a 2x16 LCD which can be used to display information found on the CAN-NET.

The kit includes:

- 1 CAN-NET Node Board
- 1 CAN-NET Wiring Harness
- 1 CAN-NET LCD Display Board

### P/N 905501

#### In Circuit Debugger Module (ICD)

The ICD Module connects between the serial port of a PC and your target board. Using the MPLAB programming environment from Microchip Technology Inc., the ICD Module allows programming and debugging of PICmicro MCUs with ICD capability. Both the CAN-NET Education Board and the CAN-NET Node Board are equipped with ICD ports.

#### CAN-NET Product Summary

- P/N 905181 Qik Start CAN-NET Kit \***
- P/N 905185 CAN-NET Education Board**
- P/N 905186 CAN-NET Node Board**
- P/N 905187 CAN-NET I/O Board**
- P/N 905188 CAN-NET LCD Board**
- P/N 905189 CAN-NET Analog Out Node Kit\***
- P/N 905190 CAN-NET Analog In Node Kit\***
- P/N 905191 CAN-NET Prototype Board**
- P/N 905192 CAN-NET I/O Node Kit\***
- P/N 905501 In Circuit Debugger Module (ICD)**

\*includes 905186

Other Diversified Development Products

PRODUCT	QIK 16	QIK 17	Education	CAN	Design Center
P/N	905150	905160	905173	905185	905500
PIC12CXXX	X			X	X
PIC16C5X	X				X
PIC16C55X	X				X
PIC16C62	X			X	X
PIC16C63	X			X	X
PIC16C64	X		X	X	X
PIC16C65	X			X	X
PIC16C66	X			X	X
PIC16C67	X		X	X	X
PIC16C62X	X				X
PIC16C642	X			X	X
PIC16C662	X		X	X	X
PIC16C71X	X				X
PIC16C72	X			X	X
PIC16C73	X			X	X
PIC16C74	X		X	X	X
PIC16C76	X			X	X
PIC16C77	X		X	X	X
PIC16C773	X			X	X
PIC16C774	X		X	X	X
PIC16F8X	X				X
PIC16F87X	X			X	X
PIC17CXXX		X			X
PIC18C2XX	X				X
PIC18C4XX	X		X	X	X

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