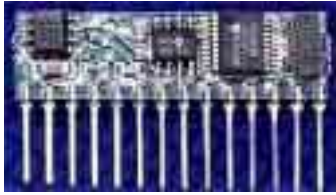


# Power Supply Accessories

## PM104: Power Management



### FEATURES

- ◆ Field programmable in PBasic language
- ◆ Intelligent power supply control
- ◆ Capable of delayed on/off control
- ◆ Installs on either the V104 or HE104
- ◆ In circuit programmable
- ◆ Can issue PC/104 bus interrupts
- ◆ Highly compact
- ◆ Can put the V104 or HE104 into "sleep mode"
- ◆ -40 to 85C operation
- ◆ Low quiescent current
- ◆ Works with the BC104 to create a universal battery charger

### General Description

The PM104 is a complete BASIC-programmable computer, packaged as a 14-pin SIP module. The brain of the PM104 is an 18-pin BASIC interpreter chip. A 256-byte EEPROM holds a tokenized version of the program, which is executed by the interpreter. The remainder of the circuit board is taken up by a 4-MHz resonator, 5-volt regulator, and brown-out circuit.

The PM104 is programmed in a simple BASIC language called PBasic. The language includes familiar instructions, such as GOTO, FOR...NEXT, and IF...THEN, as well as instructions, such as SERIN (serial input), PWM, and BUTTON.

### Instruction Set Summary

IF...THEN	LET	BRANCH	GOTO
GOSUB	RETURN	FOR...NEXT	SERIN
LOOKUP	LOOKDOWN	RANDOM	OUTPUT
LOW	HIGH	TOGGLE	PULSOUT
INPUT	PULSIN	REVERSE	BUTTON
SEROUT			

## BC104: Battery Charger



### FEATURES

- ◆ Plugs into the V104 or HE104 Vehicle Power Supplies
- ◆ Switch mode technology
- ◆ 0 to 1 amp adjustable
- ◆ Universal battery charging (with PM104)
- ◆ Dual channel 12-bit A/D convertor
- ◆ Automatic battery switch-over
- ◆ Short Circuit protected
- ◆ Lead Acid, Nickel Cadmium, Nickel Hydride
- ◆ Extended temperature operation
- ◆ Can be used without PC/104 bus

### General Description

The BC104 provides an economical method of creating an Un-interruptible Power Supply (UPS) for PC/104 embedded applications. The BC104 is a constant current charger (Max 1.0A) capable of charging battery packs to 20V. The BC104 constant current is set with a 0 to 1V signal, either from an external source or from the Power Management PM104 unit.

With the addition of the PM104, any charging algorithm can be supported, to charge any type of rechargeable battery. The PM104 interfaces to the BC104 dual channel 12-bit Analog to Digital convertor for measuring charging voltage, charge current or battery temperature. Two 10 pin headers mount the BC104 onto the V104 or HE104 without exceeding the PC/104 form factor.