

A NEW WAY TO LEARN 16 bit Micros!

A 16-bit Micro Experimenter for Solderless Breadboards

The 16-bit Micro Experimenter is an innovative solderless breadboard kit solution developed by a Microchip Academic Partner for the practicing engineer, hobbyist or student. The Experimenter allows for prototype exploration and testing of Microchip 16 bit PIC24F or PIC33F Microcontrollers with other electronics using the convenience of a solderless bread board environment

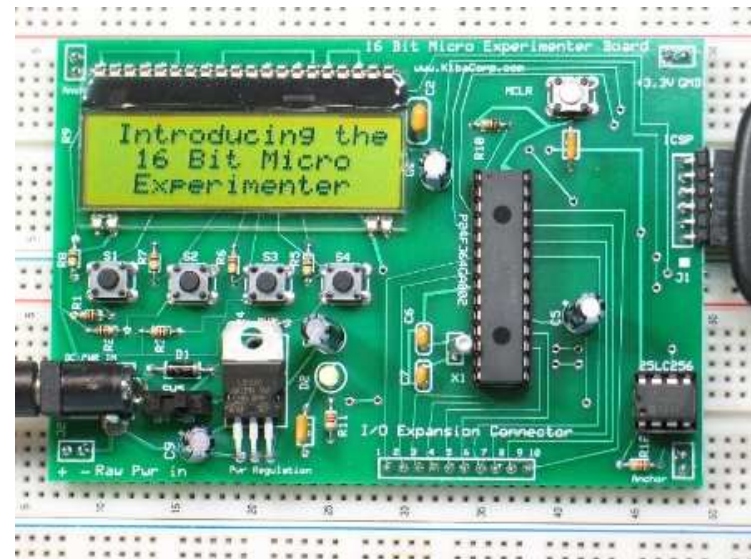
Features

- Plug in Module Format with build in 3.3V regulator for use with larger solderless breadboards
- 16x3 low profile LCD display and 4 user defined push buttons
- ICSP™ interface for in circuit programming and debug
- Standard I/O Expansion Bus for breadboard access to PIC24F or PIC33F peripheral set
- On Board 32 KHz timing crystal for accurate timekeeping
- On board 32 KB EEPROM
- Uses PIC24FJ64GA002 or any 28pin PIC33F
 - +3.3V Operation 16 MIPS with +5 Volt logic compatibility
 - 64K Flash 8K RAM
 - Host of on chip peripherals: ADC, Programmable I/O, Dual UART, Dual SPI, I²C™, Analog Comparators, Capture/Compare Modules
- On/off switch with power LED indicator – power by wall transformer or direct connection. +3.3V out can be used for breadboard as well.
- Comes in kit format using full compliment of thru-hole parts for ease of assembly

- Demonstration Code to check board operation and facilitate experimentation

Free Software Applications

- Large application set for home laboratory or school use
 - Allows use of Microchip extensive support libraries
- Example Apps:
 - HTTP Web Server
 - FAT16 SD-Card Storage and retrieval
 - 100 year Date/Time Calendar
 - RGB Color palette
 - Thermometer
 - RTOS Multi-task experiments
 - Assortment of other applications (user defined)
 - Graphics, Accelerometer, Ranger Finder, RFID, PIR experiments
 - Elementary introductory exercises for PIC24F or PIC33F ADC, CCP, UART and Digital ports



Software Demo and Applications

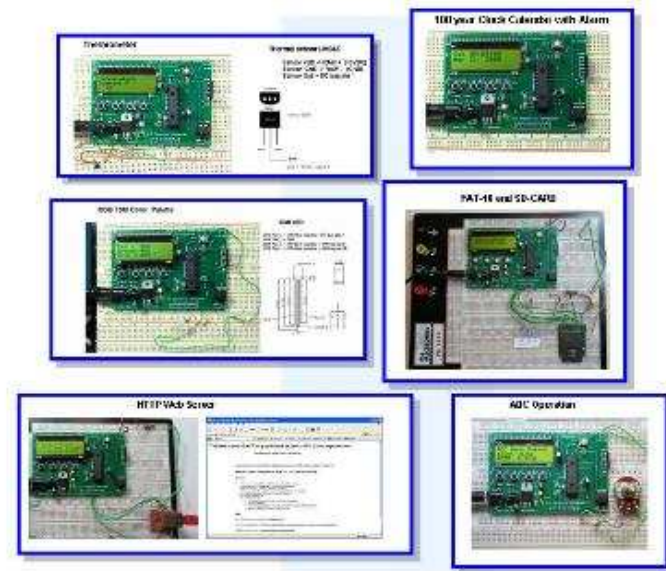
The Experimenter is equipped with a built-in demo. The demo and all other applications were written using Microchip free MPLAB and free student edition PIC24F C compiler.

The demo shows uses the Experimenter in Thermometer, RGB and Clock calendar applications. The user invokes the specific functional application by using the push buttons. Some of Demos require additional hardware that the user must supply.

Other supported apps are Web Server and SD-Card Data logger using FAT-16 as well as a series of introductory demos. All software is free and KibaCorp is dedicated to continuously updating and adding to this software base.

The Experimenter has an ICSP interface and can be programmed with a Microchip PICKIT2 or ICD.

The Experimenter can be powered with a external power supply at least +5Vdc and/or a wall transformer 6-9Vdc 150 ma or greater Center positive 5.5x2 .1mm barrel connector.



Microcontroller based Educational Products, Product Ideas, and Design services



KibaCorp, an Annapolis Maryland based Technology Company.

Each kit is \$55.00 --To purchase please visit our website at www.kibacorp.com



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