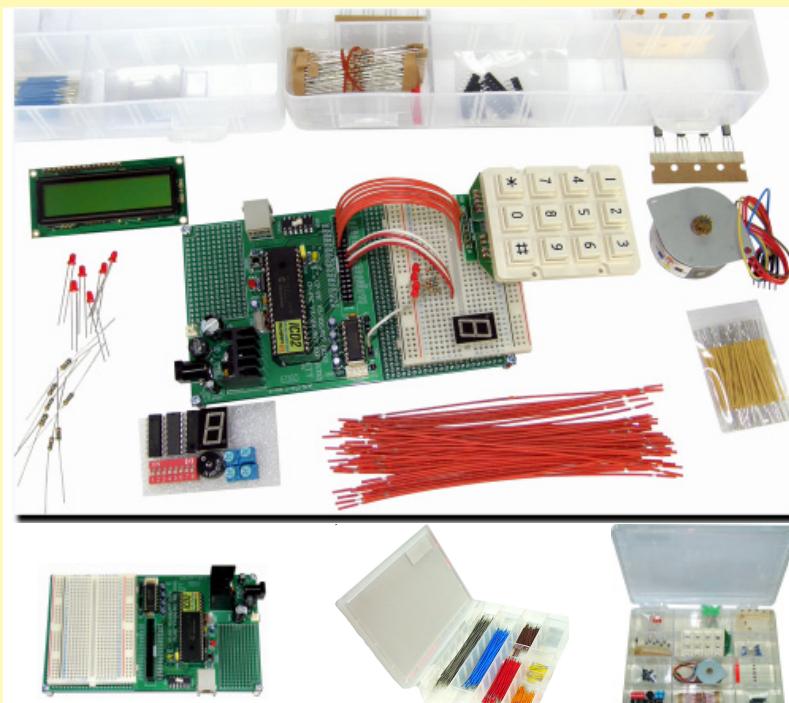


## CP-PIC TRAINING V3 (ICD2) BOX (P-CP-A-00100)

It is the Training Board that is designed to learn and understand the operation of CPU MICROCONTROLLER in the series of PIC No.PIC16F877. It makes user understand HARDWARE and SOFTWARE well and user is able to connect circuit on the PROJECT BOARD by self with provided devices such as LCD Display, STEPPING MOTOR, Key Telephone and etc. Moreover, it makes user understand better because user can learn commands of CPU PIC from ASSEMBLY Language and BASIC Language. In this case, user only writes program on computer PC by ASSEMBLY Language or BASIC Language, then connects the circuit and finally, LOAD program into CPU PIC through PORT USB. This Training Board is compatible with many versions of Board Program such as ET-PGM PIC USB V1, ET-PGM PIC USB V1 PLUS, ET-PGM PIC USB V2, or ET-ICDX V1.0(OPTION). Moreover, there is manual to learn and understand CPU 16F877.



### PIC Training



#### Users can learn experiments in ET-PIC TRAINING V3 BOX :

1. HARDWARE AND SOFTWARE CPU PIC NO. PIC16F877
2. ASSEMBLY LANGUAGE OF PIC16F877
3. BASIC LANGUAGE OF PIC
4. TEST LCD MODULE
5. TEST STEPPING MOTOR
6. TEST ANALOG TO DIGITAL CONVERTER OF CPU PIC
7. EXTERNAL INTERRUPT
8. TEST MINI SE INPUT
9. TEST BUZZER OUTPUT
10. TEST LED 7-SEGMENT
11. TEST LED OUTPUT
12. TEST DIP SW INPUT



CP-PIC TRAINING V3(ICD2) BOX s contained in high quality plastic box that can keep the Training Board perfectly; moreover, it is more convenient to use and keep the devices. This kit consists of...

1. BOARD CP-PIC V3/877 EXP(ICD2) uses CPU PIC16F877
  - RUN Frequency 10MHz
  - 8K BYTE FLASH Memory
  - A TO D 10 BIT 8 CHANNEL
  - 34 PIN I/O BUS CONNECTOR
  - HIGH CURRENT SINK/ SOURCE 25/25 mA
  - RJ-11(ICD2) is used to DOWNLOAD program into MCU by ET-PGM PIC USB V1/V1 PLUS/V2/ET-ICDX V1.0, ET-PGM PIC PK3/PK3 PLUS (OPTION); moreover, there is SW to choose the operationmodes
  - PROJECT BOARD Size: 8 x 6 CM.
2. ET-HARD WARE KIT V1 consists of many devices such as STEPPING MOTOR, DIP SW, LED, IC ULN2003, RESISTOR, CAPACITOR, KEY TELEPHONE, VR 10K, SPEAKER, DIODE, TRANSISTOR
3. LCD MODULE 16-CHARACTER 2-LINE with Connector
4. ET-JWBOX300; there are 300 wires with 6 different sizes and it is ready to use with PROJECT BOARD instantly.
5. 10VDC DC ADAPTER to be Power Supply for Training Board
6. Book "Learn and Understand Architectural Structure of Microcontroller PIC16F877" published with high quality paper. 240 pages. (Thai language.)
7. Book "User's Manual of PIC16F877 and PIC18F458 by ASSEMBLY Language and BASIC Language"; it describes how to use programs to write CPU PIC and how to interface circuit to test with PROJECT BOARD. (Thai language.)
8. BASIC Language Program of PIC with User's Manual
9. High quality plastic box to keep Training Board ET-BOX1
10. CD-ROM Program runs on the Operating System of WINDOWS 98/ME/XP

\*\*\* OPTION that is necessary components will be used with this TRAINING SET but it is not included in this TRAINING Set; so, user must additionally purchase it by self if has not. There are 6 types of devices to program data into MCU; in this case, it is interfaced through PORT USB of computer PC.

#### ET-PGM PIC USB V1



(See more details of this board on Page 42)

#### ET-PGM PIC USB V1 PLUS



(See more details of this board on Page 42)

#### ET-PGM PIC USB V2



(See more details of this board on Page 43)

#### ET-ICDX V1.0



(See more details of this board on Page 42)

#### ET-PGM PIC PK3



(See more details of this board on Page 41)

#### ET-PGM PIC PK3 PLUS



(See more details of this board on Page 41)