# ET-PIC16/32 START KIT (P-ET-A-00396)
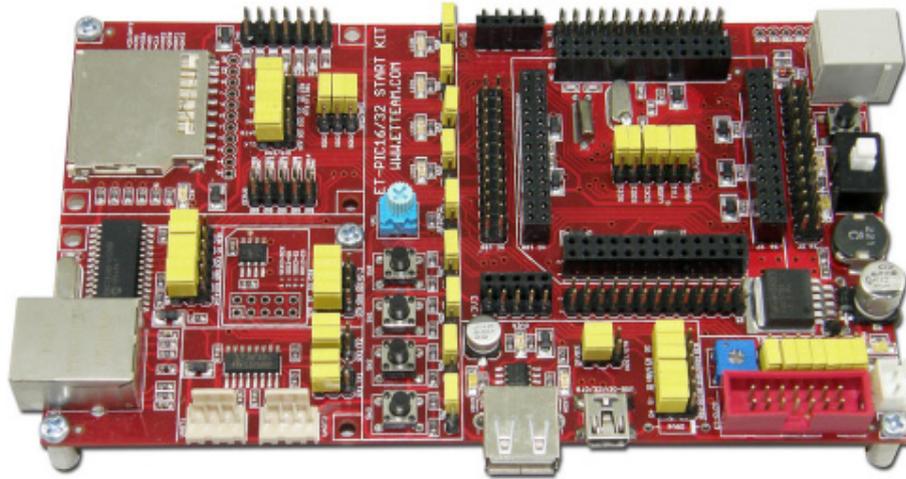
The great Training Kit "ET-PIC16/32 START KIT" is the device that user can choose and change MCU as preferred; now there are 4 available versions of MCU that are PIC24, PIC32.

ET-PIC16/32 START KIT is the Training Board for learning and developing Microcontroller of MICROCHIPS and support applications with Microcontroller 16/32 BIT 100 PIN PIC24F/PIC24H. This board is designed to be flexible, and compatible with various MCU numbers. In this case, user can change and remove MCU on board by self; so it decreases the problem if MCU is out of order or it can not FLASH any data into memory because it exceeds the prescribed amount. The board structure provides the important circuits and basic I/O for using and learning initially.

Specifications of Board ET-PIC16/32 START KIT

- Support application of MCU 16 BIT and 32 BIT of MICROCHIPS 100 PIN and it is compatible with MCU in the family of PIC24F/PIC24F, dsPIC33 and PIC33. Now, ETT produces 4 versions of MCU MODULE as follows;
  - PIC24FJ28GB110, PIC24HJ256GP210
  - PIC32MX360F512L, PIC32MX460F512L
- X' TAL 8MHz for SYSTEM CLOCK SOURCE
- X' TAL 32KHz for RTC CLOCK SOURCE
- ETHERNET LAN DRIVER No.ENC28J60 with RJ45 LAN PORT
- SPI EEPROM No.25LC256 for using and storing WEB PAGE CODE to test ETHERNET LAN according to the examples from MICROCHIPS TCP/IP STACK
- SD CARD INTERFACE with signal CARD DETECT and WRITE PROTECT
- RS232 UART DRIVER with Connector 4 PIN standard of ETT 2-CHANNEL
- USB INTERFACE supports application of USB Interface that is both formats of DEVICE/ OTG and HOST. It is compatible with MODULE PIC32MX460F512L and MODULE PIC24FJ128GGB110.
- 14 PIN HEADER LCD it interface with CHARACTER LCD
- 4 of LED INDICATOR for testing operation of OUTPUT
- 4 of SW PUSH BUTTON for testing operation of INPUT
- 1 of Adjustable VOLUME(VR) to adjust 0-3.3V Voltage for testing ADC (ADC in the part of MCU does not exceed 3.3V).
- RJ11 ICD2 PORT standard of ICD2 MICROCHIPS supports applications of IN-CIRCUIT and DEBUG; moreover, there is SW to ON/OFF signal pin for PROGRAM/DEBUG and general application of PORT, with LED to display the status.
- Programming data into MCU by ICD2 through ET-PGM PIC USB V1/V1 PLUS, ET-PGM PIC USB V2, ET-ICDX V1.0, ET-PGM PIC PK3, ET-PGM PIC PK3 PLUS
- JTAG PORT IDE HEADER 14PIN for PROGRAM/DEBUG with JTAG TOOLS of MICROCHIPS
- DEBUG PORT IDE HEADER 10PIN for DEBUG with DEBUG TOOLS(MPLAB REAL ICE IN-CIRCUIT EMULATOR) of MICROCHIPS
- SWITCHING REGULATE 3.3V/3A to reduce the heat from IC REGULATE
- PCB Size: 15.3 x 9 CM.
- Use POWER +5VDC with Connector TYPE B (it is compatible with ETT POWER version ET-SWITCHING ADAPTER 5V 1.2A TYPE B)
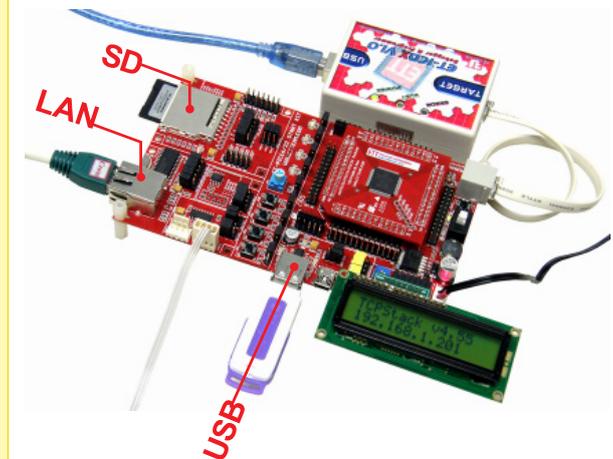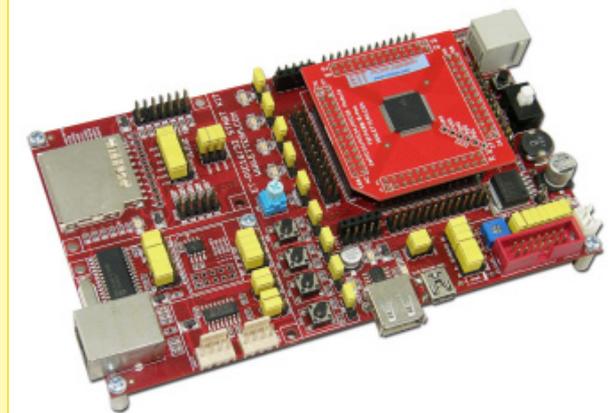
- LCD 16 X 2 & CONVER 14 PIN (LCD 16 CHARAC TERS 2 LINES WITH PCB CONNECT PORT 14 PIN LCD)
(P-ET-A-00364)

- CABLE USB TO 5P MINI
(A-CB-A-00044)

- CABLE LAN CROSS 2 M (P-CB-A-00027)
- CABLE LAN DIRECT 2 M (P-CB-A-00028)

ET-SWITCHING ADAPTER 5V 2A TYPE B

INPUT   220VAC
OUTPUT   5VDC 2A (10W)
HOUSING 2.50 mm. 2 PIN

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