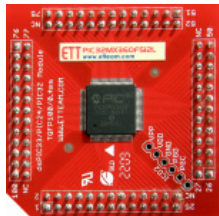


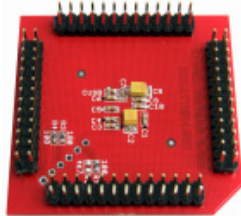
ETT PLUG IN MODULE MICROCHIPS

It is the part of MCU MICROCHIPS that consists of Circuit R, C SMD TYPE on PCB to be all-purpose MODULE MCU; so, it can be used with ET-PIC16/32 START KIT or user maybe design and assemble these Modules with other circuits by self as follows;

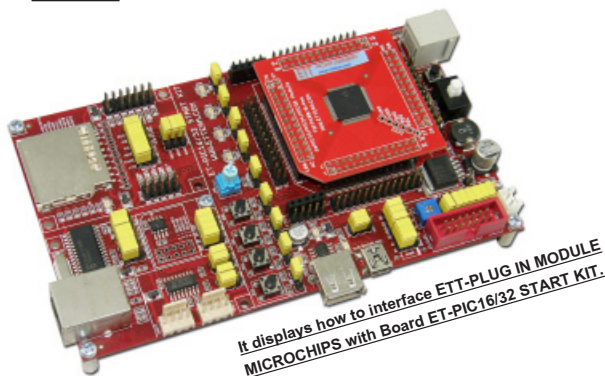
- MODULE can be used with MODULE of MICROCHIPS 100 PIN; in this case, there are 2 sizes according to the pin size of MCU; TQFP100/0.4mm. and TQFP100/0.5mm.
- 6 PIN ICD2 PIN HEADER on board (customer needs to expand it by self)
- 4 of Connector 26 PIN HEADER 2.54 mm. under PCB can be connected from MCU
- PCB Size: 5.1 x 5.1 cm.



FRONT



BACK



It displays how to interface ETT-PLUG IN MODULE MICROCHIPS with Board ET-PIC16/32 START KIT.

ET-PIC24FJ128GB110

(P-ET-A-00397)



MCU MICROCHIPS, 128 KBYTE FLASH, 16 KBYTE RAM, 83 I/O, 32 MHz SPEED, 16 X 10 BIT A/D, 16 BIT CORE SIZE, 100-TQFP/0.4mm. It can be used with PORT USB and developed program by ET-PGM PIC USB V1, V1 PLUS, V2, ET-ICDX V1.0, ET-PGM PIC PK3, ET-PGM PIC PK3 PLUS.

ET-PIC24HJ256GP210

(P-ET-A-00398)



MCU MICROCHIPS, 256 KBYTE FLASH, 16 KBYTE RAM, 85 I/O, 40 MIPS SPEED, 32 X 10 BIT A/D, 16-32 BIT CORE SIZE, 100-TQFP/0.5mm. It is developed by ET-PGM PIC USB V1, V1 PLUS, V2, ET-ICDX V1.0, ET-PGM PIC PK3, ET-PGM PIC PK3 PLUS.

ET-PIC32MX360F512L

(P-ET-A-00399)



MCU MICROCHIPS, 512 KBYTE FLASH, 32 KBYTE RAM, 85 I/O, 80 MHz SPEED, 16 X 10 BIT A/D, 32 BIT CORE SIZE, 100-TQFP/0.4mm. It can be programmed by ET-ICDX V1.0, ET-PGM PIC PK3, ET-PGM PIC PK3 PLUS

ET-PIC32MX460F512L

(P-ET-A-00401)



MCU MICROCHIPS, 512 KBYTE FLASH, 32 KBYTE RAM, 83 I/O, 80 MHz SPEED, 16 X 10 BIT A/D, 32 BIT CORE SIZE, 100-TQFP/0.4mm. It can be used with PORT USB and developed by ET-PGM PIC PK3, ET-PGM PIC PK3 PLUS, ICD3 OR PicKit3.

ET-BASE dsPIC30F4011

(P-ET-A-00407)

ET-BASE dsPIC30F2010

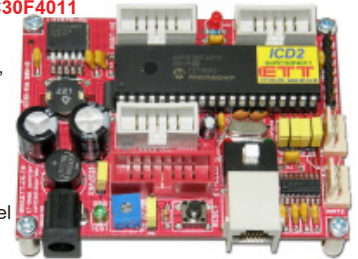
(P-ET-A-00406)

ET-BASE dsPIC30F2010/4011 is the new board from ETT in the series of dsPIC30F that uses dsPIC 28 PIN No.dsPIC30F2010 for version ET-BASE dsPIC30F2010 and uses dsPIC 40 PIN No.dsPIC30F4011 for version ET-BASE dsPIC30F4011.

This dsPIC30F2010/4011 is MCU from MICROCHIPS that is used to process 16 BIT data. Its outstanding ability is to process data as digital type, so it is suitable to control applications well. Internal structure of MCU is combined Microcontroller (MCU) and Circuit DSP (DIGITAL SIGNAL PROCESSING) together; so, it is called DIGITAL SIGNAL CONTROLLER.

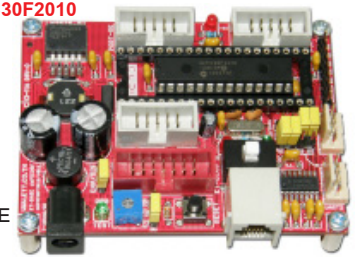
Specifications of ET-BASE dsPIC30F4011

- Use dsPIC30F4011-30I/P
- Has 48 KBYTE FLASH Memory, 2 KBYTE RAM
- Has 1 KBYTE EEPROM
- Has 5 of 16 BIT TIMER/COUNTER
- Has INPUT CAPTURE 4-Channel
- Has 10 BIT A TO D/ 9-Channel 500KSPS
- Has 2-Channel UART
- Has circuit SPI, I2C, WATCHDOG, POWER ON RESET, PWM



Specifications of ET-BASE dsPIC30F2010

- Use dsPIC30F2010-20I/P
- Has 12 KBYTE FLASH Memory, 512 BYTE RAM
- Has 1 KBYTE EEPROM
- Has 3 of 16 BIT TIMER/COUNTER
- Has 4-Channel INPUT CAPTURE
- Has 10BIT A TO D/ 6-Channel 500KSPS
- Has 1-Channel UART
- Has Circuit SPI, I2C, WATCHDOG, POWER-ON RESET, PWM



- Use CRYSTAL 7.3728 MHz; can use with PLL to run at the maximum speed of 29.4912 MHz (for version dsPIC30F4011)
- Has Connector RS232 4PIN ETT 1-Channel for version dsPIC30F2010 and 2-Channel for version dsPIC30F4011
- Use 14 PIN HEADER LCD for CHARACTER TYPE LCD
- Has 1 LED to test the operation by using RBO
- RJ11 ICD2 PORT according to ICD2 MICROCHIPS supports IN-CIRCUIT and DEBUG, SW to ON/OFF signal pins for PROGRAM/DEBUG and RUN, and LED to display operating modes (if using with this Connector RJ11 ICD2 PORT, it is compatible with ETT products such as ET-PGM PIC USB V1, ET-PGM PIC USB V1 PLUS, ET-PGM PIC USB V2, ET-ICDX V1.0, ET-PGM PIC PK3, ET-PGM PIC PK3 PLUS)
- Has 3 of Connector I/O PORT 10 PIN ETT
- Has POWER SUPPLY AC/DC INPUT 7-10V, use 5V/1A SWITCHING LM2575 REGULATE to reduce heat from the Circuit REGULATE
- Mini PCB SIZE 8x6cm. according to ETT standard
- ET-BASE dsPIC30F4011/2010 Kit consists of

1. BOARD 2. CD-ROM User's Manual, Example Programs

