ET-BASE ARM2103
(P-ET-A-00287)

... It is a new a Board Microcontroller ARM7 family that can run both 16 BIT and 32 Bit. It is higher speed than Microcontroller Ver. 8 Bit and can be directly Incircuit Download program from computer PC into FLASH Memory through PORT RS232. Additionally, Board is designed to be a small standard size as Board "ET-BASE";

we can use this board independently or use it with Board "ET-BASIC I/O V1".

- MCU ARM7 TDMI-S No.LPC2103 from PHILIPS 48 PIN LQFP TYPE
- 32 KBYTE FLASH MEMORY and 8 KBYTE RAM
- X'TAL 19.6608 MHz with maximum high speed 58.9824 MHz
- IN-SYSTEM PROGRAMMING (ISP)through ON-CHIP BOOT LOADER SOFT WARE through PORT RS232 ON BOARD
- PORT JTAG 20PIN for REAL TIME DEBUGGER
- 32 IO PIN can be interfaced with I/O 5V, CONNECTOR I/O 10 PIN ET and there's functions as following; (except A TO D that is not higher than 3.3V)
  - SPI 2 CHANNEL, I2C 2 CHANNEL
  - A TO D 10 BIT 8 CHANNEL, UART 2 CHANNEL to be RS232-1, RS232-2 as 4 PIN ET TYPE
  - TIMER 32 BIT, TIMER 16 BIT, WATCHDOG, PWM OUTPUT
- 14 PIN LCD PORT as CHARACTER TYPE
- RTC internal MCU and X'TAL 32.768 KHz with BATTERY HOLDER BOX 3V
- POWER SUPPLY for using with board (can be using version ET-SWITCHING ADAPTER 5V 1.2V TYPE H OPTION)
- PCB size 6.2 x 8.1 cm.
- ET-BASE ARM 2103 consists of…

1. ET-BASE ARM 2103
2. CABLE DOWNLOAD ET-RS232 DB 9 PIN
3. CD-ROM

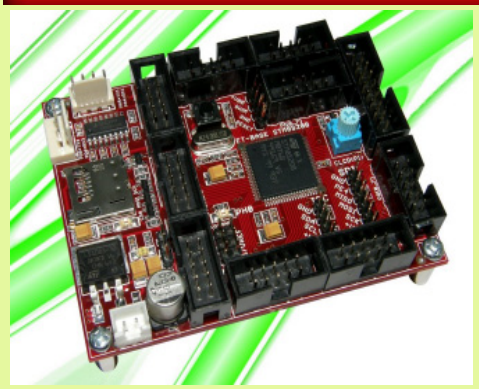
ET-BASE ARM7024
(P-ET-A-00294)

... It is a Board Microcontroller ARM7 family No. ADUC7024 from ANALOG DEVICE that is a permanent MCU on board.
There' s A TO D 12 BIT 10 CHANNEL and D TO A 12 BIT 2 CHANNEL. Board is designed as a small standard size as Board "ET-BASE"; we can use this Board independently or used with Board "ET-BASIC I/O V1".

- MCU No.ADUC7024 64 PIN LQFP TYPE with 62 KBYTE FLASH MEMORY, 8 KBYTE RAM
- A TO D 12 BIT 10 CHANNEL (0-2.5V)
- D TO A 12 BIT 2 CHANNEL (0-2.5V)
- I/O PIN can be interfaced with I/O 5V
- RUN X'TAL 32.768KHz and it can be set to run with PHASE LOCK LOOP 41.78MHz
- 3 PORT I/O 10 PIN ET
- RS232 PORT 1 CHANNEL
- CONNECTOR ARM-JTAG 20 PIN
- 14 PIN LCD PORT as CHARACTER TYPE
- TIMER/COUNTER, SPI, 16 BIT PWM, WATCHDOG
- POWER SUPPLY 5VDC (can be used with ET-SWITCHING ADAPTER 5V 1.2A TYPE H OPTION)
- PCB size 6.2 x 8.1 cm.
- Can be DOWNLOAD program from computer PC into internal FLASH memory through RS232 PORT and can be used with Program ARMWSD for running on WINDOWS 98/ME/XP/2000
- ET-BASE ARM7024 consists of…

1. ET-BASE ARM7024
2. CD-ROM
3. CABLE DOWNLOAD ET-RS232 9 PIN

ET-BASE STM8S208
(P-ET-A-00421)



This is new 8BIT Board Microcontroller from ST Company that includes basic devices completely. It is able to write program into MCU through RS232 PORT and through Connector SWIM DOWNLOAD by STM8S-DISCOVERY with C Language Program to develop. If user registers, user got 32Kbyte free for using and writing program.

Specifications of Board ET-BASE STM8208

- Use 80PIN LQFP STM8 MCU No.STM8S208MBT6B from ST Company
- 128KBYTE FLASH Memory; re-program 10,000 times
- 6KBYTE RAM, 2KBYTE EEPROM; re-written 300,000 times
- Use X'TAL RUN Frequency 24.00MHz with high speed at 20 MIPS, 3-STAGE PIPELINE
- A TO D 10 BIT 16-CHANNEL, CAN 1-CHANNEL, SPI 1-CHANNEL, UART 2-CHANNEL, I2C 1-CHANNEL, WATCHDOG, run at 2.95V-5.5V, I/O PORT 68 BIT
- Program data into MCU through PORT RS232 and through Connector SWIM DOWNLOAD by STM8S-DISCOVERY/ST-LINK

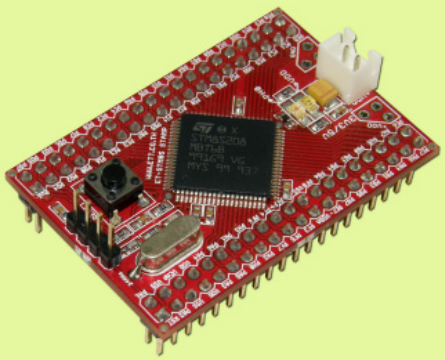
PORT RS232 4PIN ETT 2-CHANNEL

- 16PIN LCD PORT as CHARACTER TYPE (it is standard 14PIN LCD and another 2PIN is Connector LED BACKLIGHT) SLOT CARD for SD CARD(MICRO SD) with Circuit LOGIC LEVEL 3.3V Has 68BIT I/O, there are 8 of Connector 10PIN HEADER ETT
- Use C Language to develop program by using Program ST VISUAL DEVELOP to be EDITOR and Program COSMIC CXSTM8 to be COMPILER. User got 16KBYTE free for using; if registered through website, user got 32KBTYE free.
- PCB Size is 8.23 X 6.2 CM.
- Has JUMPER to select the Voltage Level between 5V and 3V3 (use ADAPTER 5V)

ET-BASE STM8S208 consists of…

1. Board
2. CD-ROM User's Manual and Program
3. Cable ET-RS232 DB9

ET-STM8S STAMP
(P-ET-A-00422)



Structure of STM8 Board is designed to be mini board that is easy to modify or connect with other Board I/O.

Specifications of Board ET-STM8S STAMP

- Use 80PIN LQFP STM8MCUNo.STM8S208MBT6B
- Use X'TAL RUN Frequency 24.00MHz
- PCB Size is 5.20 x 3.56 cm.
- Program data into MCU through Connector SWIM by using STM8S-DISCOVERY/ST-LINK
- Has 68 BIT I/O
- Use Connector PIN HEADER with 2.54mm. pitch; there are 80PIN in total that are divided into 2 rows (20 X 2)
- Use 2PIN POWER SUPPLY 5V or 3.3V (can use POWER SUPPLY from ETT version "ET-SWITCHING ADAPTER 5V 1.2A TYPE B")

ET-STM8 STAMP consists of …

1. Board
2. CD-ROM User's Manual and Program