

ET-TOUCH PAD 4 X 4
(P-ET-A-00408)

ET-TOUCH PAD 4 X 4



It is 4X4 KEY BOARD Touch Screen that uses MCU No.STM8S105C4T6 to control the operation. It is able to connect with MCU that is 5V or 3.3V and it sends data of pressing key in the format of BCD and RS232(TTL).

- It is TOUCH SENSING KEY (Touch Screen) in the format of 16 Keys CAPACITIVE SENSING (4x4).
- It uses Power Supply 3.3VDC or 5VDC for board, so it is compatible with MCU that is 3.3V or 5V. It uses 2mA current for normal usage and 8mA current while pressing keys.
- It uses sound and 16 LED on that key to display the operating status while pressing key.
- There are 2 types of sending KEY CODE of the pressed KEY;
 1. BINARY CODE (BCD 8421) through CONNECTOR 8PIN; there are 4 cables of Pin BCD, Pin ST#, Pin P#/R, Pin VCC, and Pin GND.
 2. ASCII CODE through CONNECTOR 4PIN RS232 TTL (UART), BAUD RATE 9600
 - 1 Special KEY that can be used as normal KEY or KEY FUN to press with other KEY, so it can be operated more than 16 KEY
 - 2mm. thick transparent plastic plate to support KEY TOUCH
 - Board Size 76.2 x 88.9 mm.
- ET-TOUCH PAD 4X4 consists of
 1. Board ET-TOUCH PAD
 2. 2mm. thick transparent plastic plate to support KEY



ET-KEY BOARD 4X4
(P-ET-A-00090)



It is ready-made Keyboard for adaptation with Micro board system or as 4x4 KeyBoard SW. There's 2 stickers types to use; Number 0-9 (A-F), UP, DOWN, HELP, ENTER, FUN and Designed by USER.

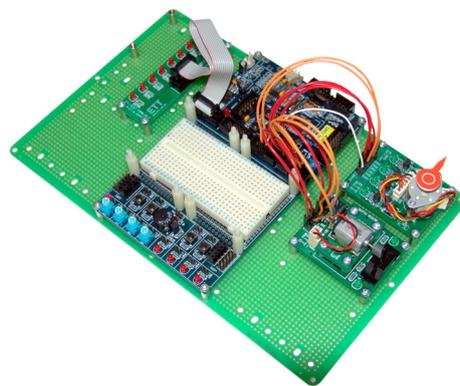
The method of second type is typing letters on papers and attach on Key and then attach with clear sticker on board again.

- BLACK PLASTIC KEYBOARD WITH WHITE AND ORANGE KEY PAD
- RUBBER KEY PAD AND PCB GOLD-PLATED FOR SW
- 16 KEY WITH 4 x 4 MATRIX KEY
- 8 PIN PORT
- KEY BOARD SIZE 10.5 x 11 x 1.1 CM.

ET-MULTI KIT BASE STAND
(P-ET-A-00311)



It is component to interface with ETT boards by using PCB-BASE STAND to be base supporter, so user can arrange test board systematically because there's a box. It is good to keep all components in the box and user can carry it to any place. It can be used with ETT Boards such as CP-JR SIZE, ET-MINI I/O BOARD, ET-10PIN TEST and etc.



CERAMIC THERMOELECTRIC COOLING MODULE (PELTIER) (A-CA-R-00007)



It is cooling device that is Ceramic Thermoelectric or Peltier. When user supplies power into this Module, it feels cool on one side and feels warm on another one side. So, it has to use cooling device to make the Module cooler; in this case, it uses HEATSINK or fan or not supply power into this Module, otherwise the MODULE may be damaged.

- Qmax (Cooling Power) 89W, 127 couples Peltier cooling
- RUN 12VDC (MAX 15.8V/10A)
- ΔTmax(?C) 67
- SIZE 40 x 40 x 3.30mm. WEIGHT 25g

ET-USB FLASH DRIVE
(P-ET-A-00344)

ET-USB FLASH DRIVE

CHIP FTDI # VNCIL-1A USB HOST CONTROLLER



ET-USB FLASH DRIVE is device that is designed to interface with FLASH DRIVE USB; so, user can use command to read file, write file, erase file, create file and etc through PORT RS232. Additionally, it can be interfaced with computer PC or Board Microcontrollers to adapt it into many applications such as storing data of GPS, Weather Detection, DATA LOGGER and etc.

- Use IC of FTDI No.VNC1L-1A USB HOST CONTROLLER
- Can communicate with FAT12, FAT16, or FAT32 FLASH DRIVE USB
- Support 8 Characters Filename and 3 Characters File Surname
- Control reading and writing FLASH DRIVE by sending COMMAND to control through PORT RS232
- Can create, read, write, erase file or DIRECTORY and can rename filename or DIRECTORY name
- Select 2 types of sending command; ASCII or HEX
- BAUD RATE uses DEFAULT 9600, N, 8, 1 and can adjust values in the range of 300 -115200
- Select signal TX, RX, GND only, or FLOW CONTROL by signal RTS, CTS
- PORT RS232 DB 9 PIN FEMALE
- USB TYPE A to interface with FLASH DRIVE USB
- POWER SUPPLY DC 9 - 12 VDC
- BLACK BOX SIZE 7.5 x 2.5 x 5 cm.
- ET-USB FLASH DRIVE consists of ET-USB FLASH DRIVE, CD-ROM User's Manual, DC POWER SUPPLY 10 VDC/850mA, DB 9 PIN MALE, CONVER DB 9 PIN



12 KEY TELEPHONE KEY BOARD
(A-SW-K-00017)



Key Telephones with 4 x 3 Matrix Key.