

**STM32F4 DISCOVERY (C-YA-A-00162)**

This is inexpensive 32 BIT Microcontroller from ST Company; it is the new series of STM32 ARM CORTEX-M4F.

This board consists of 2 main parts as listed below;



(\*\* This STM32F4 DISCOVERY set is imported product, so there is no any warranty for this mode\*\*)

**1. ST-LINK/V2** is used to download and debug into MCU STM32F407VGT6 on board through PORT USB.

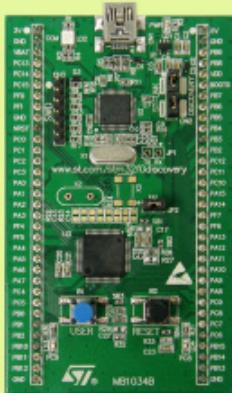
- The part of ST-LINK/V2, it uses MCUNo. STM32F103 to connect the operation between computer PC through USB PORT (CABLE USB TYPE A TO B MINI-B is OPTION, it is not included in the package).
- IN-CIRCUIT DEBUG and PROGRAM with MCU STM32F4 on board.
- Connector 6 PIN SWD is externally interfaced for DEBUG and PROGRAM with external board.

**2. STM32F4**

- Use MCU No. STM32F407VGT6, 32 BIT ARM CORTEX-M4F 1MB FLASH, 192KB RAM, LQFP100 TYPE
- Use +5V Power Supply from USB Connector or from External 5V Power Supply
- Has 3-AXIS ACCELEROMETER No. LIS302DL on board
- Has DIGITAL MICROPHONE No. MP45DT02 on board
- Has USB OTG FS with Connector MICRO-AB
- Body of Board is made as 2 of Connector PIN HEADER underneath PCB 25x2

**STM32F0 DISCOVERY (C-YA-A-00176)**

This development kit is 32 BIT Microcontroller in the series of STM32 ARM CORTEX-M0 from ST Company. There is the part of DOWNLOAD and DEBUG on board with STM32M0.



- The part of ST-LINK/V2, it is used to download data from USB PORT of computer; and, it uses Connector SWD for internal and external board.
- Use MCU No. STM32F051R8T6, 64 KB FLASH, 8KB RAM, LQFP 64 PIN
- Body of Board is made as Connector PIN HEADER underneath PCB 33x2
- Use Power Supply from USB PORT, Connector USB is in the format of USB MINI.
- Provide PCB in set



(\*\* This STM32F0 DISCOVERY is imported product, so there is no any warranty for this model\*\*)

**STM32 VALUE LINE DISCOVERY (C-YA-A-00127)**

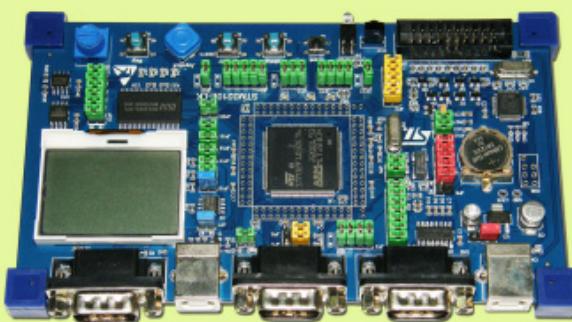
This is economical device to learn and develop STM32. STM32 VALUE LINE DISCOVERY is 32BIT STM32 ARM Cortex-M3 from ST to develop Microcontroller. It consists of 2 main devices in the package. Firstly, it is ST-LINK that is used to DOWNLOAD and DEBUG; secondly, it is Board MICRO STM32F100RBT6B.



- 1. ST-LINK:** It uses MCU No. STM32F103 to connect with computer PC through PORT USB (Connector USB MINI and Cable USB are not provided in the package).
- Do IC-CIRCUIT DEBUG and PROGRAM into MCU STM32 on board
- Has Connector 4PIN SWD that is externally connected to DEBUG and PROGRAM with external MCU

**2. Training Board**

- Use MCU No. STM32F100RBT6B that is ARM Cortex-M3, 64PIN LQFP, 128KB FLASH, 8KB RAM, 51 I/O, RUN 24MHz.
- Board is designed as Connector PIN HEADER under PCB 28 X 2PIN and 6PIN, so it can be actually used to connect or test the operation.

**STM3210E-LK (C-YA-A-00139)**

**STM3210E-LK** is a learning kit to study the operation of 32BIT STM3210E-LK from ST Company, especially in the family of STM32 ARM CORTEX-M3. This board consists of 2 parts as follows;

- 1. ST-LINK JTAG:** It uses MCU No. STM32F103 to link the device to computer PC through USB PORT.

Can operate as EMULATION, DEBUGGING and FLASH PROGRAMMING with Training Board that is connected on board.

Has Connector 20PIN JTAG as ST-LINK to interface with external MCU STM32F10X

- 2. Training Board:** There are many devices on board that are useful to learn and study.

Use MCU No. STM32F103ZET6, 512 KBYTE FLASH, 144-LQFP Circuits on board for testing the operation

- 128 KB FSMC SRAM
- 128 MB FSMC NAND FLASH
- USB
- SD CARD SOCKET
- VR TEST A/D
- IR LED TRANSMITTER & RECEIVER
- Use Connector USB as Power Supply of board

**STM3210E-LK**

consists of... **1.** Board STM3210E

**2.** 3 of CD-ROMs; IAR KICKSTART, KEIL RELEASE

1.2009 and STM32

**3.** Cable USB A-B TYPE, Cable RS232

**STM8S-DISCOVERY (C-YA-A-00120)**

This 8BIT STM8S-DISCOVERY is the new and economy kit to develop MICROCONTROLLER in the STM8 family from ST Company. It consists of 2 main parts as follows;

- 1. Training board:** It consists of circuits...

- MCU No. STM8S105C6T6, 32KB FLASH PROGRAM, 2KB RAM, 1KB EEPROM
- Circuit for testing operation is designed to be SW TOUCH SENSING BUTTON
- Connector PORT I/O 10PIN

**2. ST-LINK**

- Use MCU No. STM32F103C8T6 to connect with computer PC through USB PORT (Connector USB MINI)
- Can IN-CIRCUIT DEBUGGING and PROGRAM with STM8 MCU
- Can break or divide this board into 2 parts to use with other STM8 Boards

(\*\* This economy STM8S-DISCOVERY Kit is imported from foreign country; so, ETT has no warranty for this product.)