Requirements

SOFTWARE REQUIREMENTS

STM32 CUBE IDE

COMPONENTS

STM32F4O7VG MICROCONTROLLER BOARD

DESCRIPTION

STM32F407VG

The STM32F407 Kit takes advantage of the high-performance STM32F407 microcontrollers' capabilities to make it simple for users to create audio-based applications. It comes with an ST-LINK embedded debug tool, an ST-MEMS digital accelerometer, a digital microphone, an audio DAC with integrated class D speaker driver, LEDs, pushbuttons, and a USB OTG micro-AB connector.Ethernet connectivity, an LCD display, and other features have been added to the STM32F4 DISCOVERY kit. The STM32F405xx and STM32F407xx families are built around the high-performance Arm® Cortex®-M4 32-bit RISC core, which runs at up to 168 MHz.

FEATURES OF STM32F407VG MICROCONTROLLER

- In a LQFP100 package, the STM32F407VGT6 microcontroller has a 32-bit ARM Cortex-M4 with FPU core, 1-Mbyte Flash memory, and 192-Kbyte RAM.
- On-board ST-LINK/V2 or ST-LINK/V2-A on STM32F4 DISCOVERY (old reference) or STM32F407G-DISC1 (new order code)
- USB ST-LINK with three separate interfaces and re-enumeration capability.
- Virtual Com port Debug port (with new order code only)
- Large-scale storage (with new order code only)
- Board power is supplied through USB or an external 5 V supply source.
- 3 V and 5 V external application power supply.

HIGHLEVEL REQUIREMENTS

Programming language(C language)

Arm based
microcontroller(STM32F40VGT6)

operating system(Windows)

RAM(Min 4GB)

Hard Disk(Min 250GB)

LOWLEVEL REQUIREMENTS

ON-Ignition key

Press Multi-functional
button

4 Different Color Leds

Timer

OFF-Wiper button