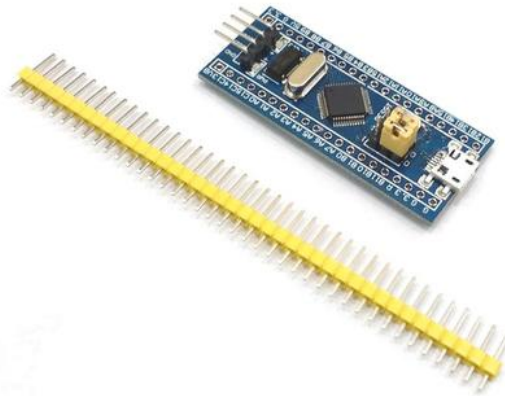# STM32F103C8T6 ARM STM32 Minimum System Development Board

This board is low cost Minimum System Development Board for ARM Microcontroller – STM32F103C8T6. Board is suitable for learners that want to learn STM32 microcontroller with ARM Coretex-M3 32-bit core.

Features

- On-board Mini USB interface, you can give the board power supply and USB communication.

- On-board test indicator LED

- On-board reset button and power indicator LED

- On-board 100ma 3.3V Regulator

- All GPIO are led out and the names of the pins are marked

- After soldering the headers, you can directly plug the board onto the breadboard

Technical Specifications

- CPU Part Number: STM32F103C8T6

- Core: ARM 32 Cortex-M3 CPU.

- Debug mode: SWD (can be programmed with ST-LINK V2)

- CPU Internal Maximum Clock : 72MHz

- External Clock Source: 8MHz crystal

- 64K flash memory, 20K SRAM

- 2.0-3.6V power, I/O

- Reset(POR/PDR)

- Size:5.3cm x 2.2cm

Programming Instructions Using   STM Flash Loader

- Set Boot Jumper-0 to 1

- Set Boot Jumper-1 to 0

- Connect USB-TTL Converter's TX to PA10 on STM Board

- Connect USB-TTL Converter's RX to PA9 on STM Board

- Give 3.3V power to STM board using USB TTL converter

- Press and release reset button once

- Launch STM Flash Loader, Select Port Name (where your usb ttl converter is connected)

- Select Parity as Even, Baudate as 115200, Echo Disabled and Timeout 10s

- Press Next, and follow on screen instructions to program, erase or read STM microcontroller

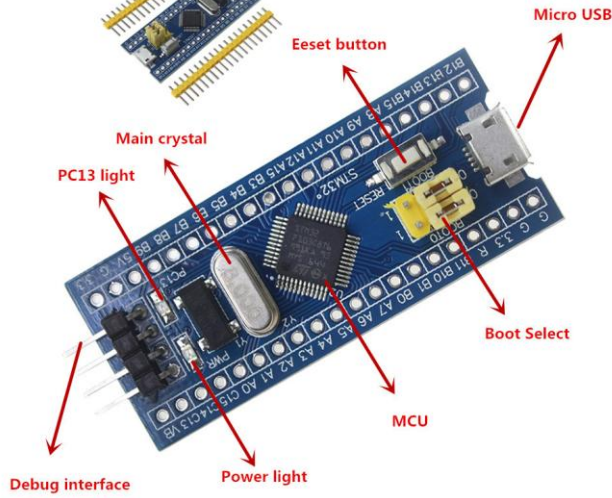**Applications of STM32F103C8T6 ARM STM32 Minimum System Development Board Module:**

- Robotics projects.
- All types of electrical/electronic projects.
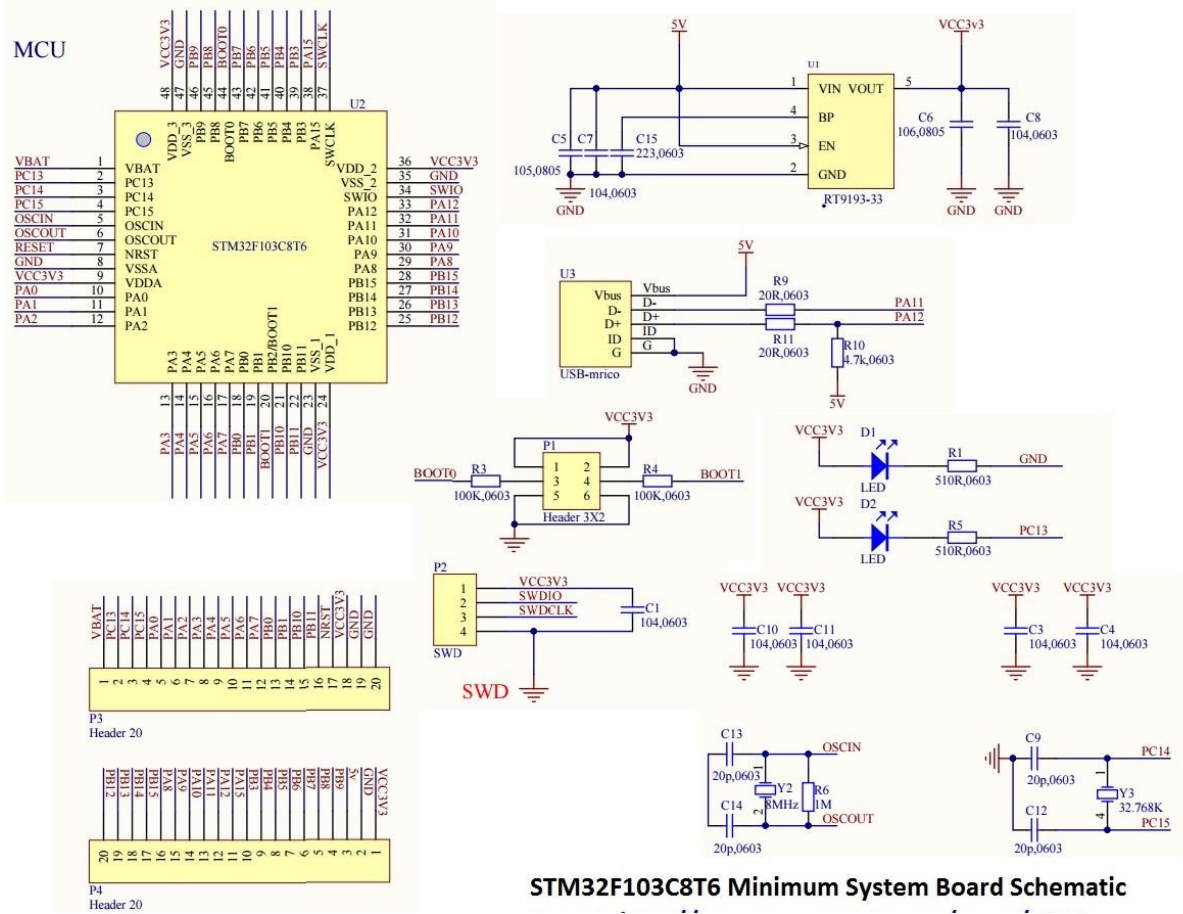- DIY Projects requiring ARM processing unit.

Table 3.   Debug connector CN2 (SWD)

Pin	CN2	Designation
1	VDD_TARGET	VDD from application
2	SWCLK	SWD clock
3	GND	Ground
4	SWDIO	SWD data input/output
5	NRST	RESET of target MCU
6	SWO	Reserved

STM32F103C8T6

Labels on board photo: Micro USB, Eeset button, Main crystal, PC13 light, Boot Select, MCU, Debug interface, Power light

Schematic :

STM32F103C8T6 Minimum System Board Schematic