EasyMx PRO v7 for STM32 ARM

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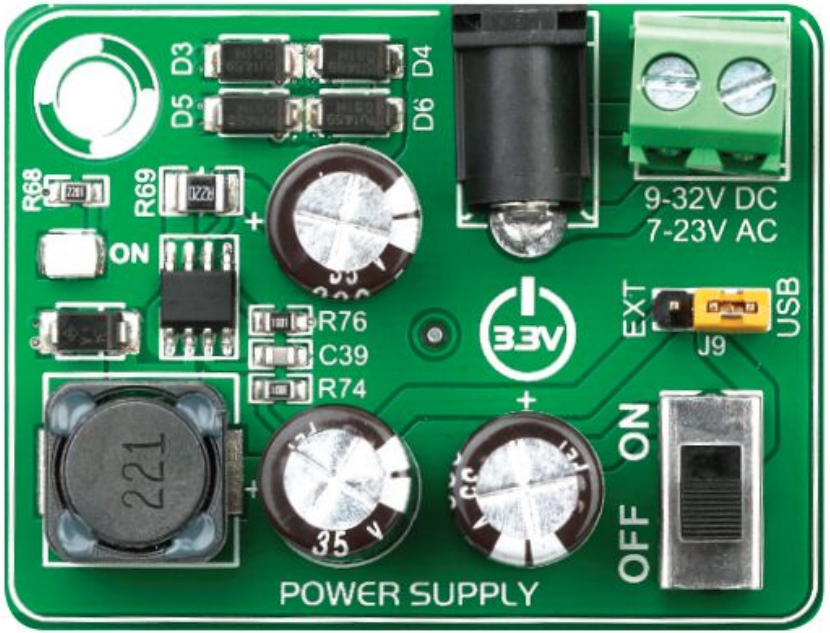
Introduction

- ARM® Cortex™-M3 and Cortex™-M4 are increasingly popular microcontrollers
- A development board with as many peripherals on the board as possible
- Covers many internal modules
- On-board programmer and debugger

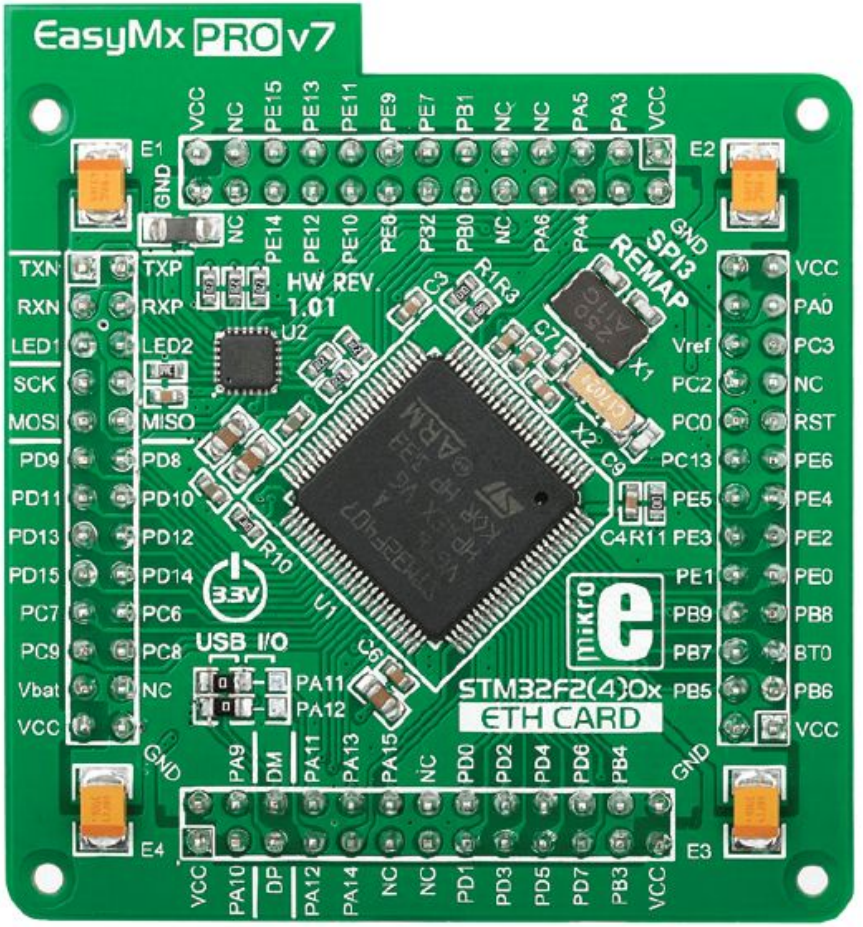
Power Supply

Creates VCC 3.3 power supply



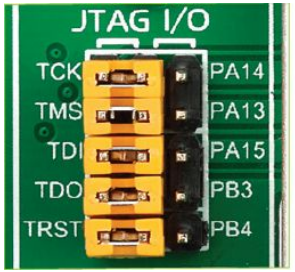
MCU Card

- STM32F407VGT6
- 16 MHz default CPU clock
- 5 PORTS (A, B, C, D, E)



MicroProg

- Fast programmer and debugger
- Enabled by placing the jumpers on the left side
- Takes the following pins for programming
    - PA13
    - PA14
    - PA15
    - PB3
    - PB4



MicroC pro for ARM

- A compiler for ARM
- Produces hex file to be programmed on MCU
- Can be used for debugging
- Download:
    - https://download.mikroe.com/setups/compilers/mikroc/arm/mikroc-arm-setup-v620.zip

Program our board

To program our board you need to do the following:

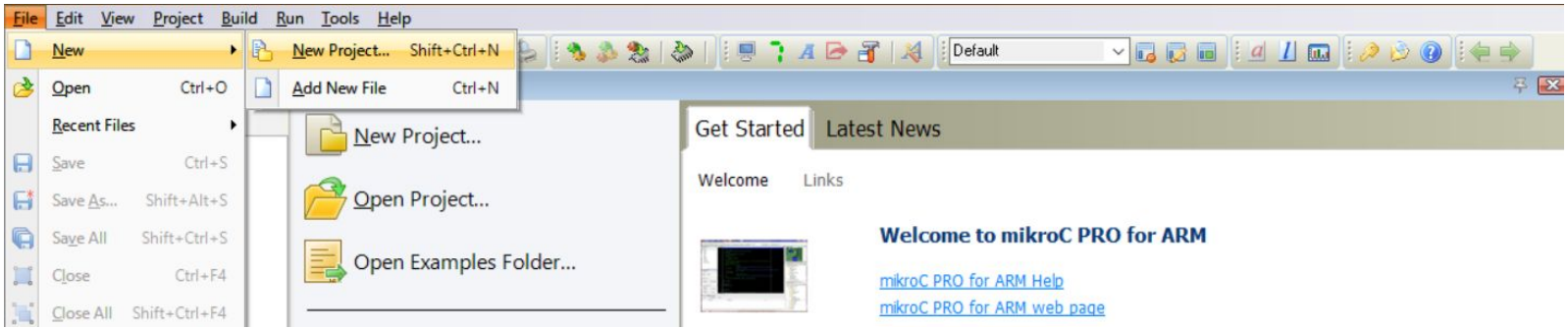
- Download and install MicroC pro for ARM
  - While installing it will ask you to install MicroProg accept and install it as it is mandatory for programming
- Connect the board to your computer with the USB cable
- Power on the board

Having done these steps, your board is ready to be programmed!

Start a new project in MicroC

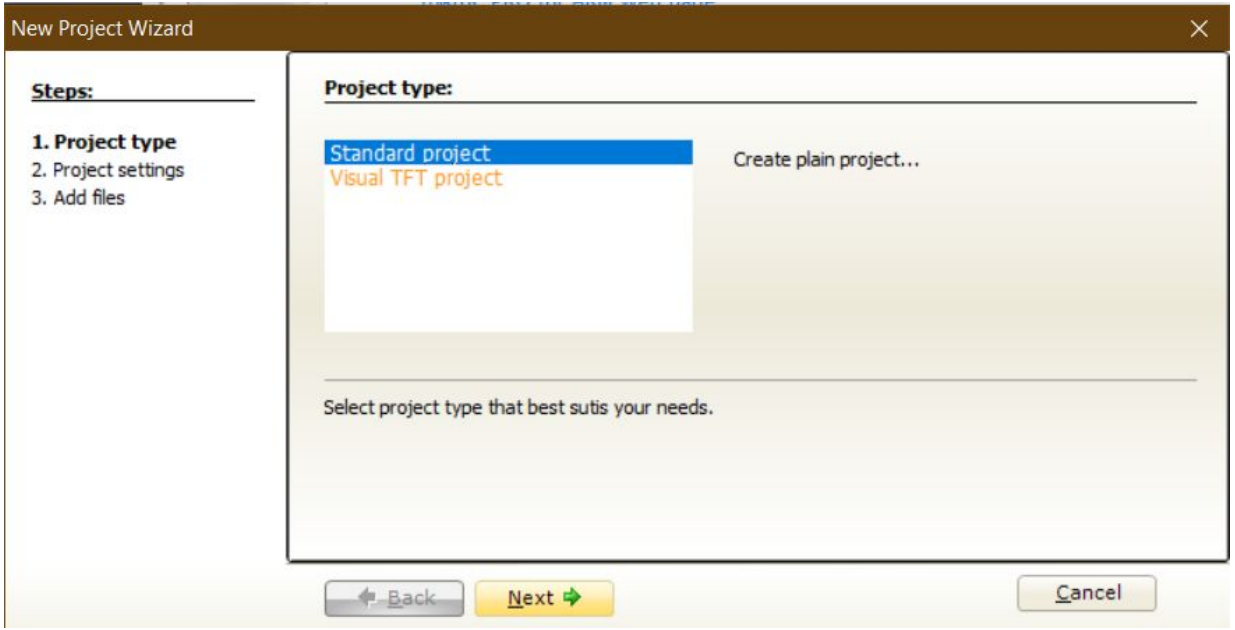
1. Open MicroC pro for ARM

2. Select File -> new -> new project



Start a new project in MicroC

3. Choose standard project then click next



Start a new project in MicroC

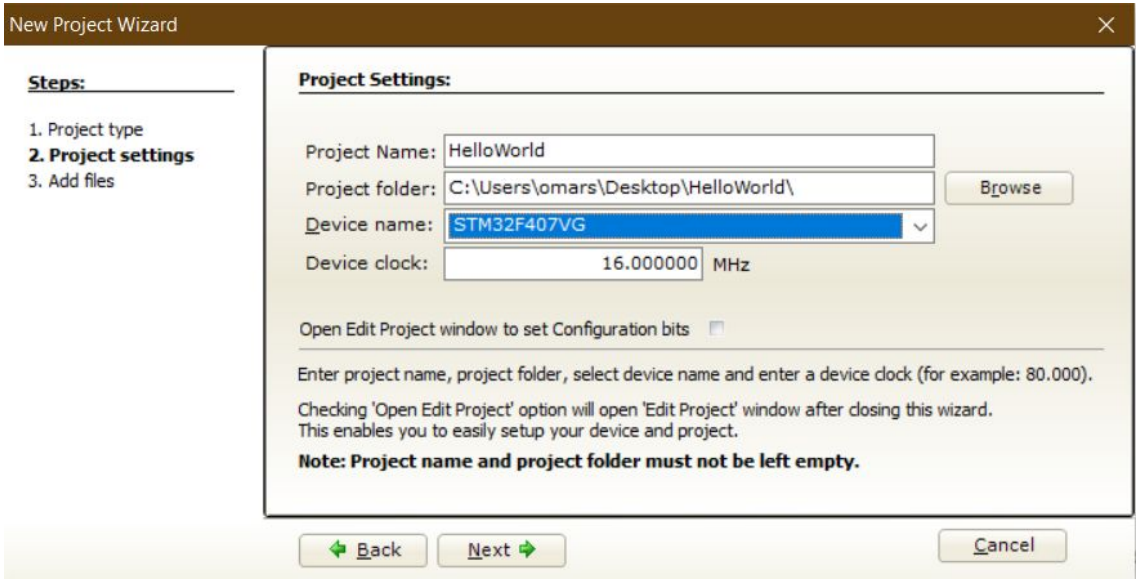
4. Type your project name in (Project Name)

5. Choose the location of the project in (Project folder)

6. Choose STM32F407VG in (Device Name)

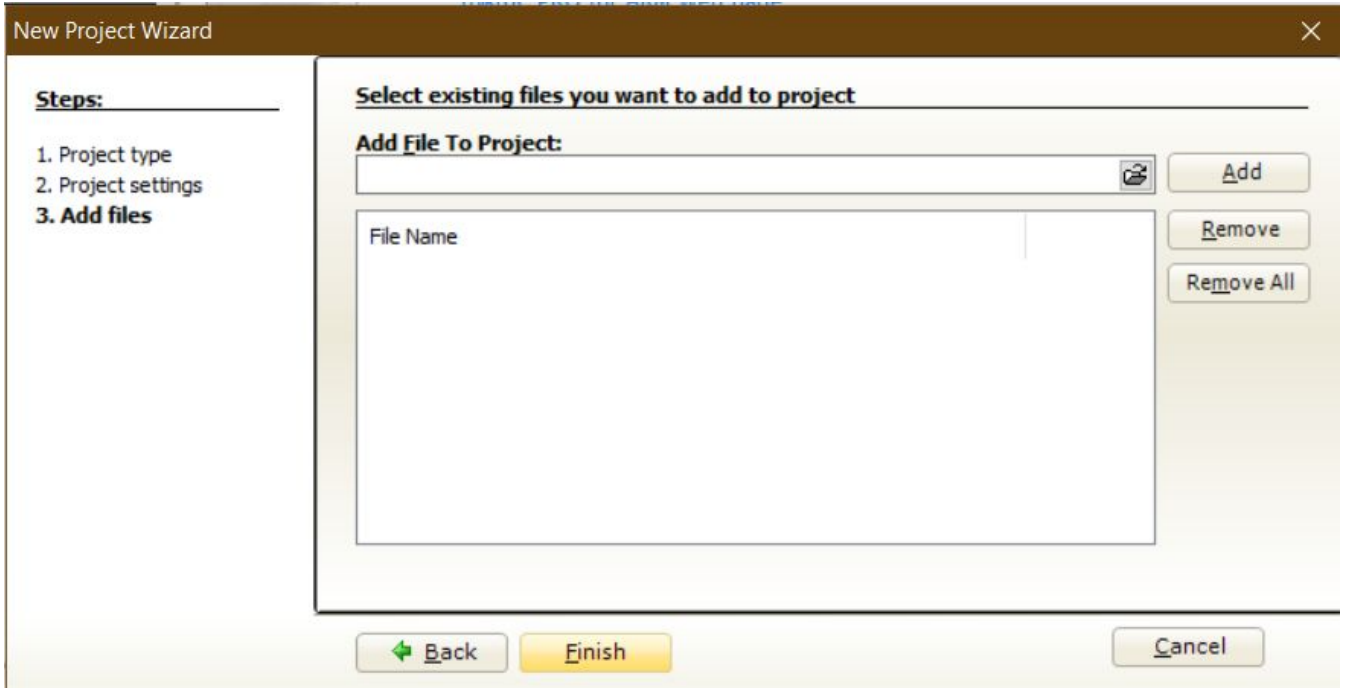
7. Choose 16 MHz as our device clock frequency

8. Click Next



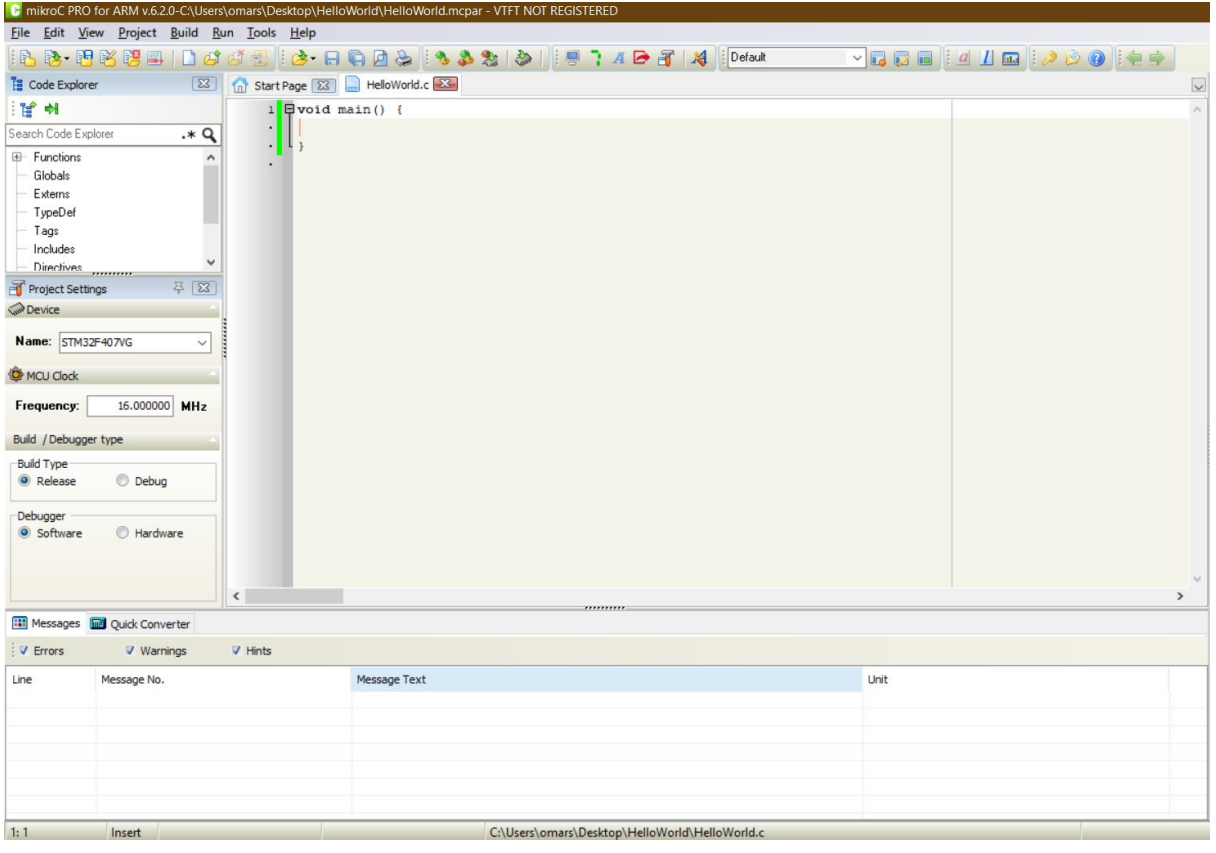
Start a new project in MicroC

9. Click Finish

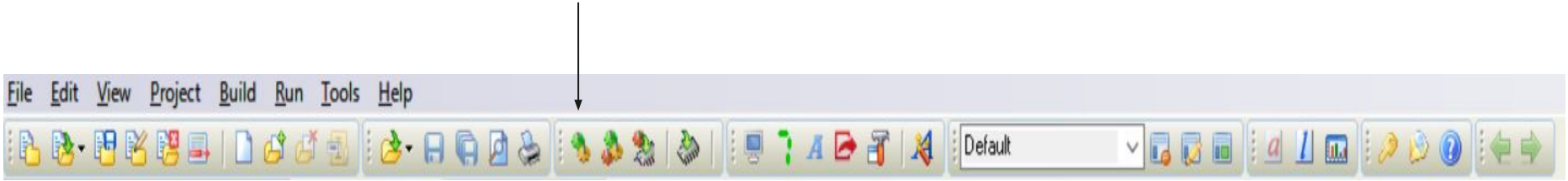


Start a new project in MicroC

You are ready to code



Build your Project



Build and Program

You need to be connected to the board and to power it on