#include <ch32v00x.h>

#include <debug.h>

void GPIO\_Config(void)

{

GPIO\_InitTypeDef GPIO\_InitStructure = {0};

RCC\_APB2PeriphClockCmd(RCC\_APB2Periph\_GPIOD, ENABLE);

// PD3 as Input Pull-Up (Button Input)

GPIO\_InitStructure.GPIO\_Pin = GPIO\_Pin\_3;

GPIO\_InitStructure.GPIO\_Mode = GPIO\_Mode\_IPU;

GPIO\_Init(GPIOD, &GPIO\_InitStructure);

// PD2 as Output (External LED)

GPIO\_InitStructure.GPIO\_Pin = GPIO\_Pin\_2;

GPIO\_InitStructure.GPIO\_Mode = GPIO\_Mode\_Out\_PP;

GPIO\_InitStructure.GPIO\_Speed = GPIO\_Speed\_50MHz;

GPIO\_Init(GPIOD, &GPIO\_InitStructure);

// PD6 as Output (Another LED or Indicator)

GPIO\_InitStructure.GPIO\_Pin = GPIO\_Pin\_6;

GPIO\_Init(GPIOD, &GPIO\_InitStructure);

}

int main(void)

{

uint8\_t GPIOInputStatus = 0;

NVIC\_PriorityGroupConfig(NVIC\_PriorityGroup\_1);

SystemCoreClockUpdate();

Delay\_Init();

GPIO\_Config();

while(1)

{

GPIOInputStatus = GPIO\_ReadInputDataBit(GPIOD, GPIO\_Pin\_3);

if(GPIOInputStatus == 0)

{

GPIO\_WriteBit(GPIOD, GPIO\_Pin\_6, SET); // Turn ON PD6 LED

GPIO\_WriteBit(GPIOD, GPIO\_Pin\_2, SET); // Turn ON PD2 LED

}

else

{

GPIO\_WriteBit(GPIOD, GPIO\_Pin\_6, RESET); // Turn OFF PD6 LED

GPIO\_WriteBit(GPIOD, GPIO\_Pin\_2, RESET); // Turn OFF PD2 LED

}

Delay\_Ms(100);

}

}

void NMI\_Handler(void)

{

}

void HardFault\_Handler(void)

{

while (1)

{

}

}