# Stm32 module using for leg blinking:-

Code:-

#include <stm32c0xx\_hal.h>

#define LED\_PORT                GPIOA

#define LED\_PIN                 GPIO\_PIN\_5

#define LED\_PORT\_CLK\_ENABLE     \_\_HAL\_RCC\_GPIOA\_CLK\_ENABLE

void SystemClock\_Config(void);

void initGPIO()

{

  GPIO\_InitTypeDef GPIO\_Config;

  GPIO\_Config.Mode = GPIO\_MODE\_OUTPUT\_PP;

  GPIO\_Config.Pull = GPIO\_NOPULL;

  GPIO\_Config.Speed = GPIO\_SPEED\_FREQ\_HIGH;

  GPIO\_Config.Pin = LED\_PIN;

  LED\_PORT\_CLK\_ENABLE();

  HAL\_GPIO\_Init(LED\_PORT, &GPIO\_Config);

  \_\_HAL\_RCC\_GPIOA\_CLK\_ENABLE();

}

int main(void)

{

  HAL\_Init();

  SystemClock\_Config();

  initGPIO();

  while (1)

  {

    HAL\_GPIO\_TogglePin(LED\_PORT, LED\_PIN);

    delay(500);

  };

  return 0;

}

void SystemClock\_Config(void)

{

  RCC\_OscInitTypeDef RCC\_OscInitStruct = {0};

  RCC\_ClkInitTypeDef RCC\_ClkInitStruct = {0};

  RCC\_OscInitStruct.OscillatorType = RCC\_OSCILLATORTYPE\_HSI;

  RCC\_OscInitStruct.HSIState = RCC\_HSI\_ON;

  RCC\_OscInitStruct.HSIDiv = RCC\_HSI\_DIV1;

  RCC\_OscInitStruct.HSICalibrationValue = RCC\_HSICALIBRATION\_DEFAULT;

  RCC\_ClkInitStruct.ClockType = RCC\_CLOCKTYPE\_HCLK | RCC\_CLOCKTYPE\_SYSCLK | RCC\_CLOCKTYPE\_PCLK1;

  RCC\_ClkInitStruct.SYSCLKSource = RCC\_SYSCLKSOURCE\_HSI;

  RCC\_ClkInitStruct.SYSCLKDivider = RCC\_SYSCLK\_DIV1;

  RCC\_ClkInitStruct.AHBCLKDivider = RCC\_HCLK\_DIV1;

  RCC\_ClkInitStruct.APB1CLKDivider = RCC\_APB1\_DIV1;

}

