

**Gebze Technical University
Computer Engineering**

CSE 433 - 2020 Spring

STM HW2 REPORT

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$$\begin{array}{lcl}
 \text{CLK Freq} = 100 \text{ MHz} & \} & \text{Prescaler} \rightarrow 10^4 \\
 \text{Period} = 10 \text{ ns} & & \text{Counter Period} \rightarrow 10^4 \\
 \\
 \frac{10 \cdot 10^{-9}}{\text{Period}} \cdot \frac{10^4}{\text{Psc}} \cdot \frac{10^4}{\text{CP}} = \underline{1 \text{ sec}}
 \end{array}$$

Clock frekansı 100Mhz iken timer modülü ile 1 saniyelik bir zaman dilimi oluşturmak için prescaler ve timer counter period yukardaki gibi ayarlanmıştır.

Additional Software Pinout

TIM3 Mode and Configuration

Mode

Slave Mode Disable

Trigger Source Disable

Clock Source Internal Clock

Channel1 Disable

Channel2 Disable

Channel3 Disable

Channel4 Disable

Combined Channels Disable

☐ Use ETR as Clearing Source

☐ XOR activation

☐ One Pulse Mode

Configuration

Reset Configuration

☒ NVIC Settings ☒ DMA Settings

☒ Parameter Settings ☒ User Constants

Configure the below parameters :

Search (Ctrl+F)

Counter Settings

Prescaler (PSC - 16 bits ... 10000

Counter Mode Up

Counter Period (AutoRelo... 10000

Internal Clock Division (C... No Division

auto-reload preload Disable

Trigger Output (TRGO) Parameters

Master/Slave Mode (MS... Disable (Trigger input effect not dela...

Trigger Event Selection Reset (UG bit from TIMx_EGR)

The image shows the 'USART2 Mode and Configuration' window. On the left, the 'Connectivity' category is expanded, and 'USART2' is selected. The main window is divided into two sections: 'Mode' and 'Configuration'.

Mode Section:

- Mode: Asynchronous
- Hardware Flow Control (RS232): Disable

Configuration Section:

- Reset Configuration button
- Configuration tabs: NVIC Settings, DMA Settings, GPIO Settings, Parameter Settings (selected), User Constants
- Configure the below parameters :
- Search (Ctrl+F) input field
- Basic Parameters:
 - Baud Rate: 115200 Bits/s
 - Word Length: 8 Bits (including Parity)
 - Parity: None
 - Stop Bits: 1
- Advanced Parameters:
 - Data Direction: Transmit Only
 - Over Sampling: 16 Samples

UART modülü yukarda görüldüğü ayarlanmıştır. Sadece terminale transmit işlemi yapılacağı için data direction Transmit Only olarak ayarlanmıştır.

Tera Term: Serial port setup and connection



Port:	COM3	New setting	
Speed:	115200		Cancel
Data:	8 bit		
Parity:	none		
Stop bits:	1 bit		
Flow control:	none		
Transmit delay			
	0 msec/char	0 msec/line	

Test etmek için tera term açıp serial porttan STM32 nin bağlı olduğum com seçilip ardında serial port settings yukardaki gibi ayarlanmalıdır.