



UART 설정

UART : 범용 비동기 송수신기(Universal Asynchronous Receiver/Transmitter)

The screenshot displays the STM32CubeMX Pinout & Configuration window for the STM32F103RCTx LQFP64 microcontroller. The window is divided into four main sections: Pinout & Configuration, Clock Configuration, Project Manager, and Tools. The Pinout & Configuration section is active, showing the 'USART1 Mode and Configuration' tab. The 'Mode' section shows 'Asynchronous' and 'Hardware Flow Control (RS232)' set to 'Disable'. The 'Configuration' section shows 'Basic Parameters' with 'Baud Rate' set to '115200 Bits/s', 'Word Length' set to '8 Bits (including Parity)', 'Parity' set to 'None', and 'Stop Bits' set to '1'. The 'Advanced Parameters' section shows 'Data Direction' set to 'Receive and Transmit' and 'Over Sampling' set to '16 Samples'. The 'NVIC Settings' section shows 'USART1 global interrupt' set to 'Enabled'. To the right of the configuration window is a pinout diagram of the STM32F103RCTx LQFP64 package, showing various pins and their functions, including USART1_TX and USART1_RX.

```
// stm32f1xx_hal_uart.h
```

```
HAL_StatusTypeDef HAL_UART_Transmit(UART_HandleTypeDef *huart, uint8_t *pData, uint16_t  
Size, uint32_t Timeout);
```

• 매개 변수

1. UART_HandleTypeDef *huart : uart port 번호
2. uint8_t *pData : 전송할 데이터
3. uint16_t Size : 전송 데이터 바이트 수
4. uint32_t Timeout : 전송 시간

• example

```
uint8_t Tx_Buffer[5]={ 'H', 'E', 'L', 'L', 'O' }; // 전송할 데이터 저장 변수
```

```
// Tx_Buffer에 저장된 데이터를 1 바이트 UART1로 허용시간 2초 이내에 전송
```

```
HAL_UART_Transmit(&huart1, Tx_Buffer, 1, 2)
```

```
HAL_Delay(500);
```

SeiralPortMon에서 connect

