

Spring 2024: Digital System Design

Appendix : How to Use Putty and HyperTerminal

1. Check UART Port number

Check USB serial port number.

- Please connect the UART Cable to the PC.
- Go to Control Panel > Device Manager > Port(COM & LPT) and check the USB Serial **Port number**.
- Note the **Port number**. It will be used for UART communication.

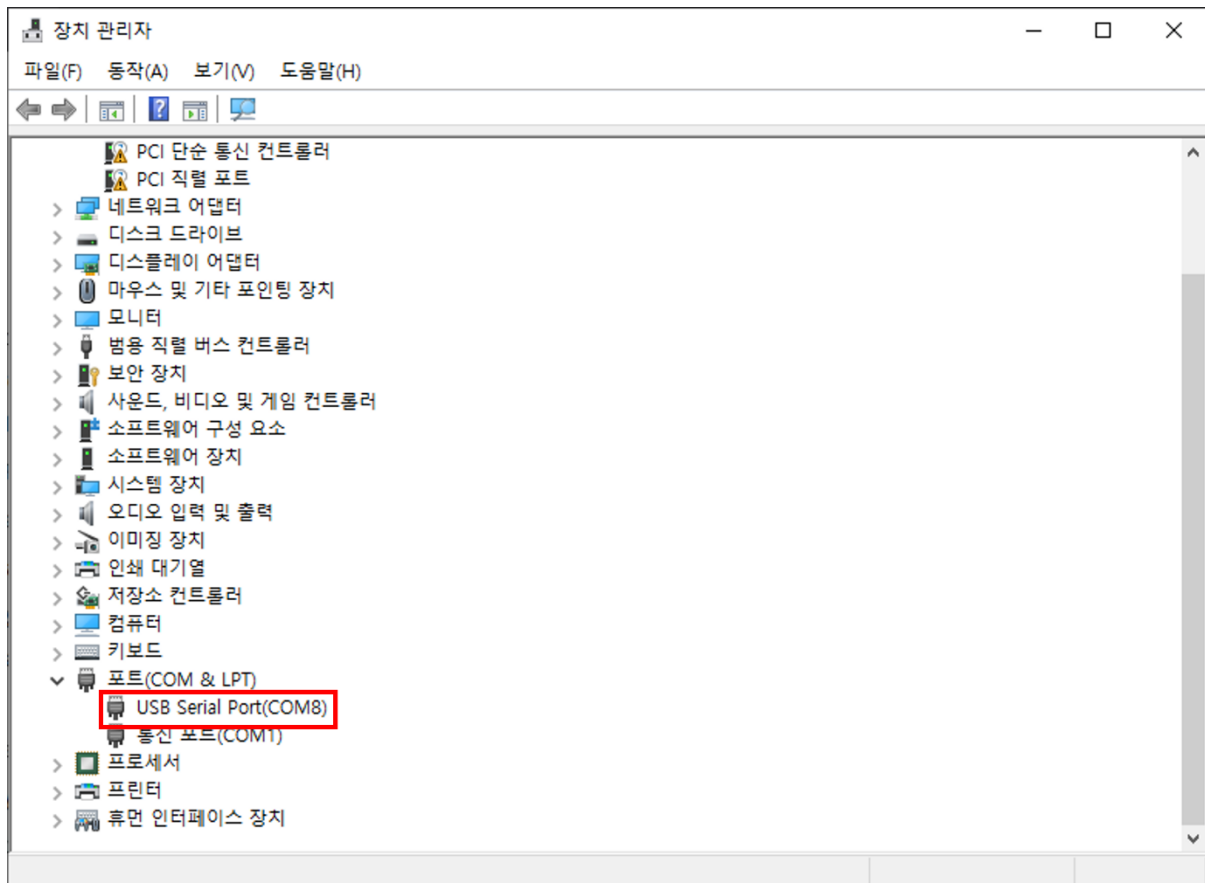


Fig. 1. Device Manager.

2. How to use Putty

You can use Putty as terminal programs for UART.

a) UART Configuration

Open Putty and change the configuration based on your UART settings.

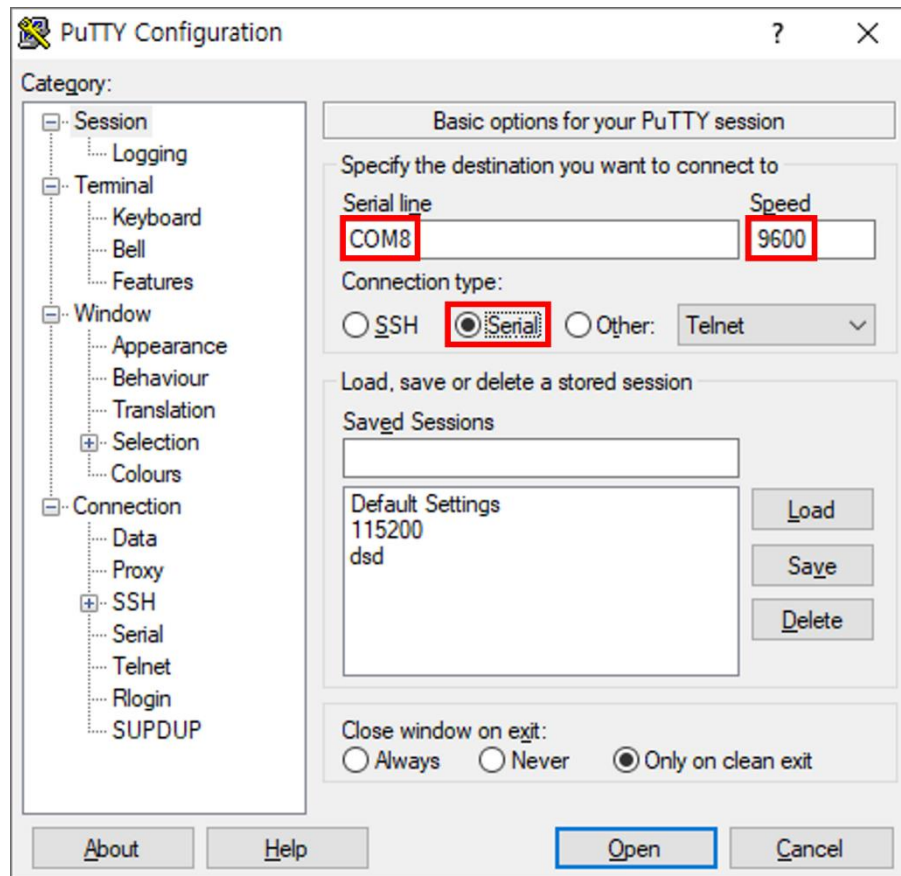


Fig. 2. Putty Configuration.

- Select "Serial" as the Connection type.
- Enter the **Port number** in the serial line and the BAUD rate in the Speed.
- Click the Open button to finish the configuration and start UART communication.

b) Connect to UART

In the Putty window, you can transmit/receive the serial data

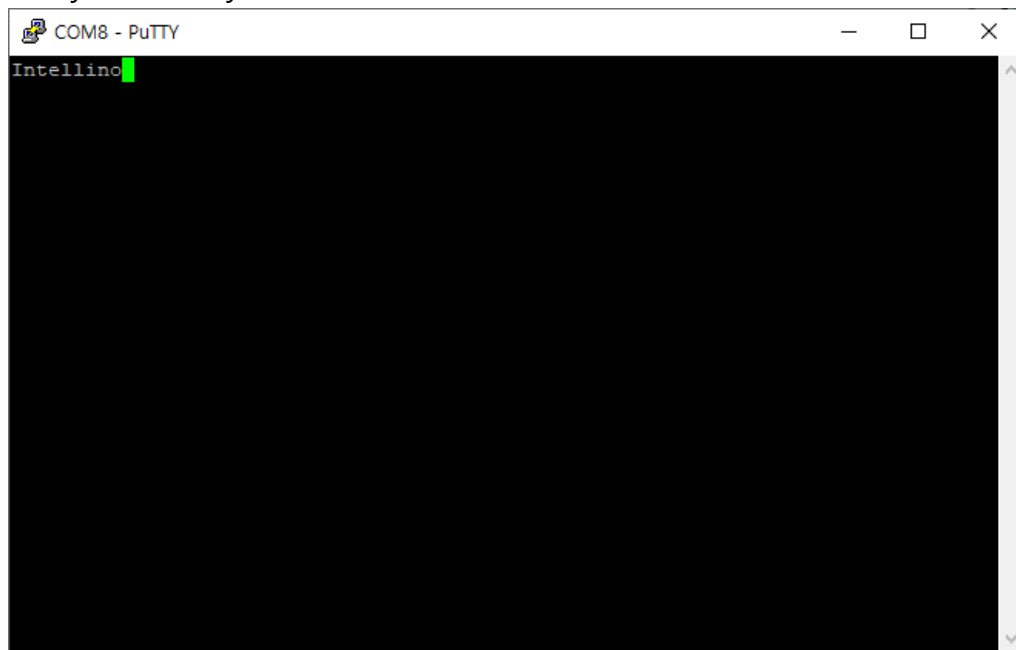


Fig. 3. Putty window.

- Input data is transmitted through UART.
- Received data is displayed in the Putty window.

3. How to use HyperTerminal

You can use HyperTerminal as terminal programs for UART.

a) New Connection

- Enter a name for new connection and click the OK button.

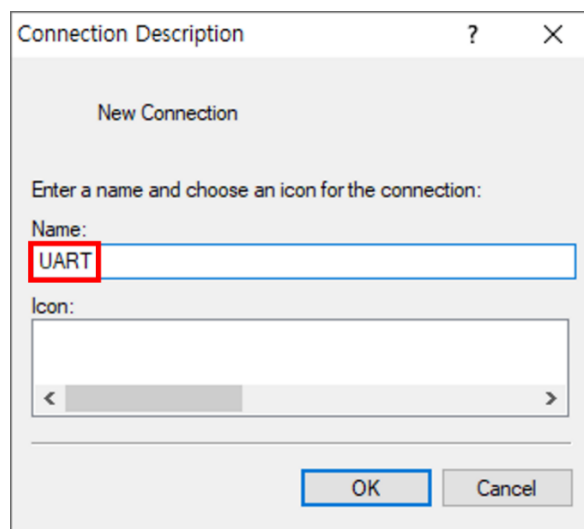


Fig. 4. New connection.

- Select the **Port number** in the Connect using tab and click the OK button.



Connect To

UART

Enter details for the phone number that you want to dial:

Country/region: 대한민국 (82)

Area code: 02

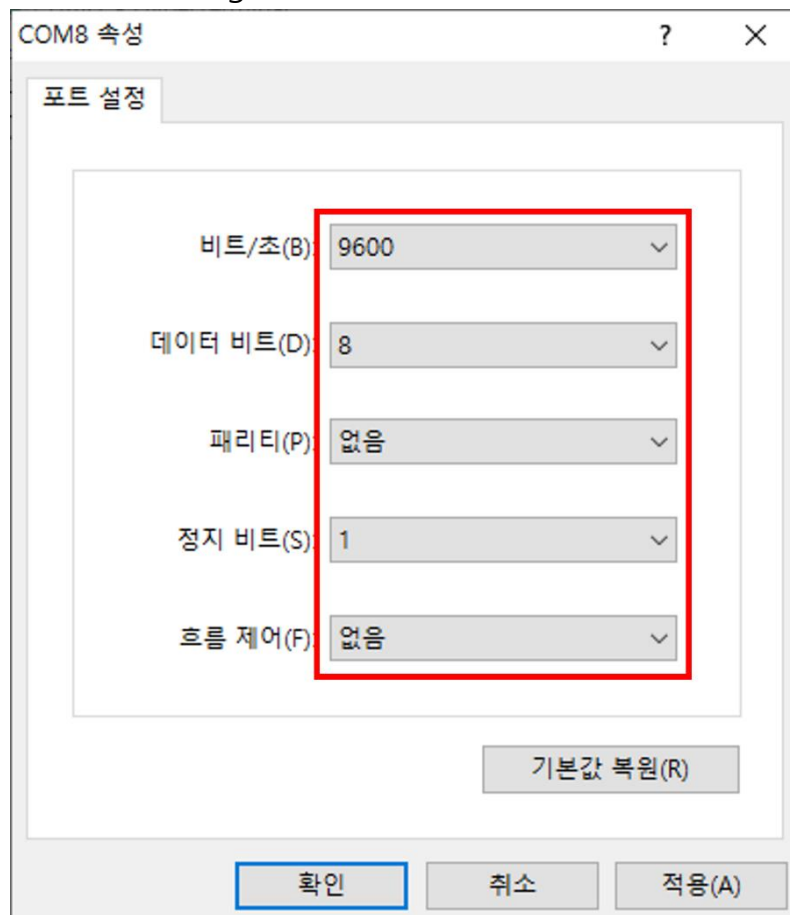
Phone number:

Connect using: COM8

OK Cancel

Fig. 5. Select the Port number.

- Select the UART configuration and click the OK button.



COM8 속성

포트 설정

비트/초(B): 9600

데이터 비트(D): 8

패리티(P): 없음

정지 비트(S): 1

흐름 제어(F): 없음

기본값 복원(R)

확인 취소 적용(A)

Fig. 6. UART configuration.

(We use this UART configuration in the lab 9.)

b) Connect to UART

In the HyperTerminal window, you can transmit/receive the serial data

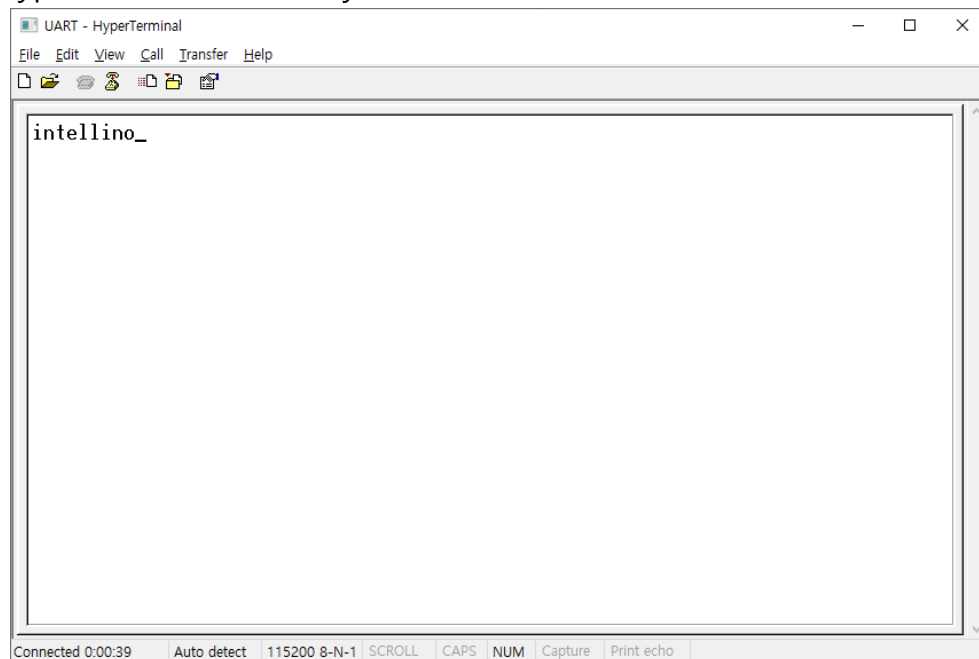


Fig. 7. HyperTerminal window.

- Input data is transmitted through UART.
- Received data is displayed in the HyperTerminal window.

You can connect/disconnect UART using the buttons on the top bar.

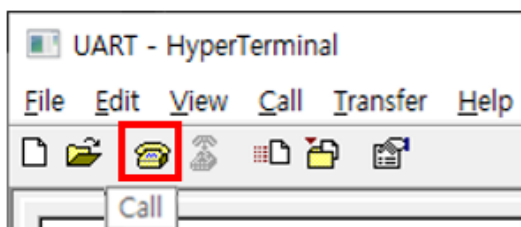


Fig. 8. Call button.

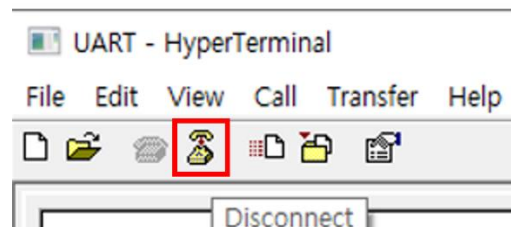


Fig. 9. Disconnect Button.