

UART Serial Console

Most of radxa's products define pins 8 (TX) and 10 (RX) on the GPIO pins as UART serial communication interfaces to make it easier to troubleshoot problems in the early startup phase of the system.

Preparation

- Radxa product with GPIO, compatible power supply
- PC
- USB to TTL Serial Cable





TIP

For Radxa products based on Rockchip chips, the default UART configuration is 1500000n8 without flow control.

Please check if your USB to TTL serial cable supports 1.5M baud rate:

- Based on [CP210X](#) and [PL2303x](#) some products have baud rate limitations.
- Based on FT232RL, some products have [power issues](#).

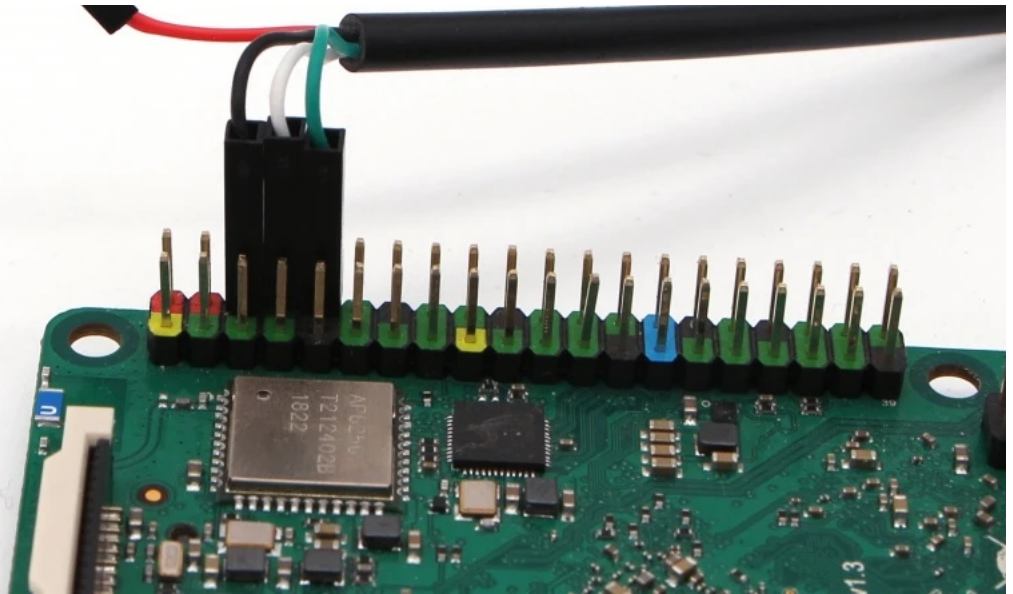
The Following text uses a serial cable based on [CH340](#).

Serial Connection

As shown below, connect the USB to TTL serial cable:

Radxa SBC	Connection	Serial Cable
GND (pin 6)	<---->	Black line
TX (pin 8)	<---->	White line
RX (pin 10)	<---->	Green line





DANGER

Please do not connect the red power line!

Using Serial Tools

For Radxa products based on Rockchip chips, the default UART configuration is as follows:

```
baudrate: 1500000
data bit: 8
stop bit: 1
parity : none
flow control: none
```

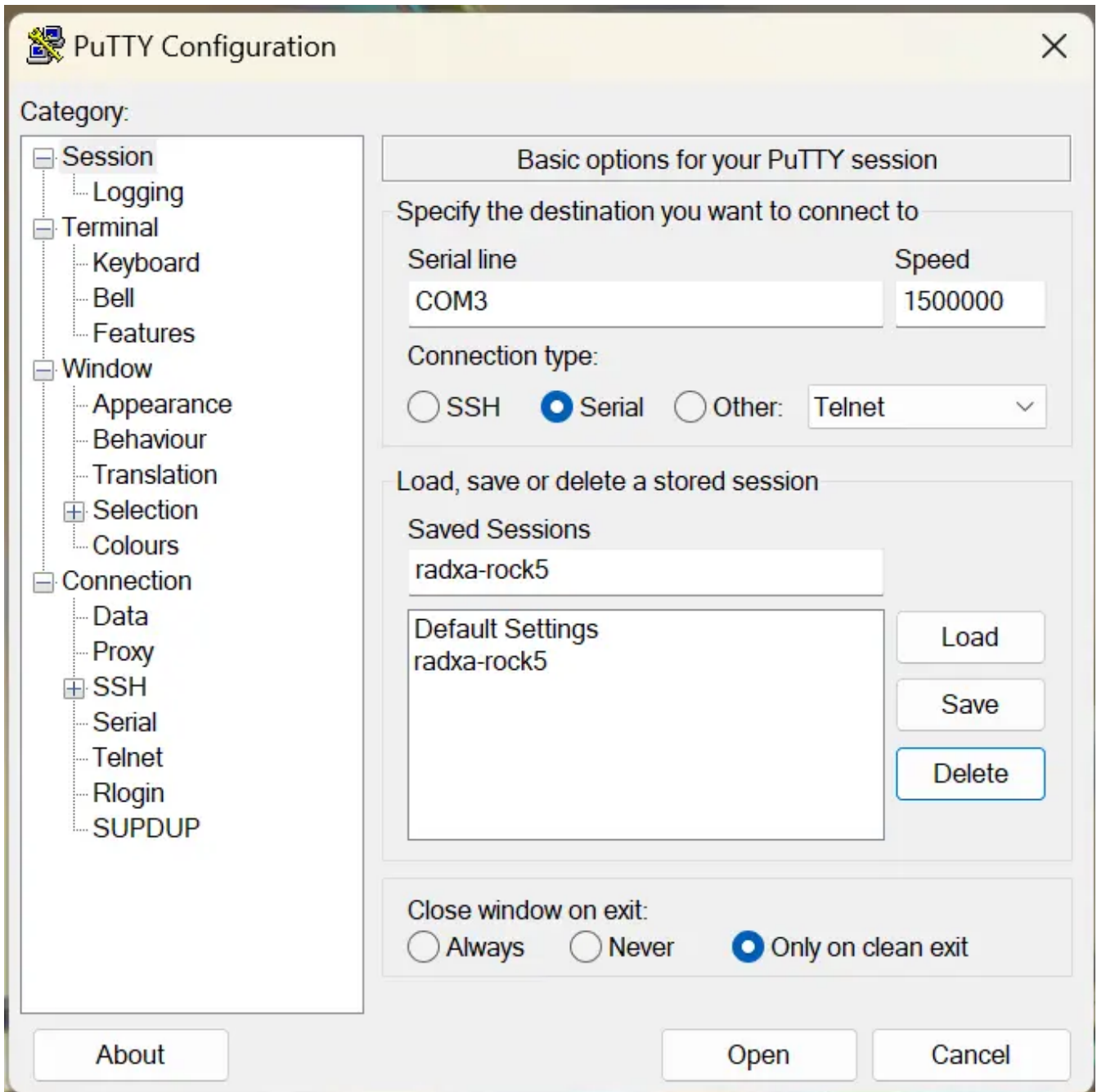
Windows Linux Mac

Windows

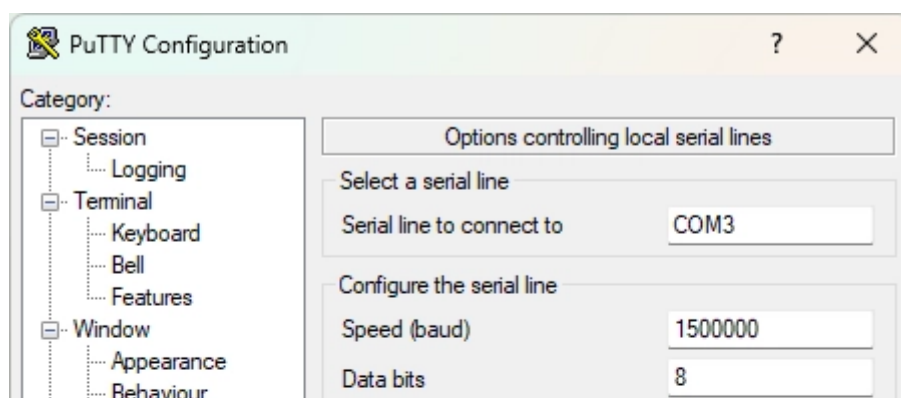
Putty is a serial tool that supports multiple baud rates on Windows. Here's how to use Putty to connect to the serial port.

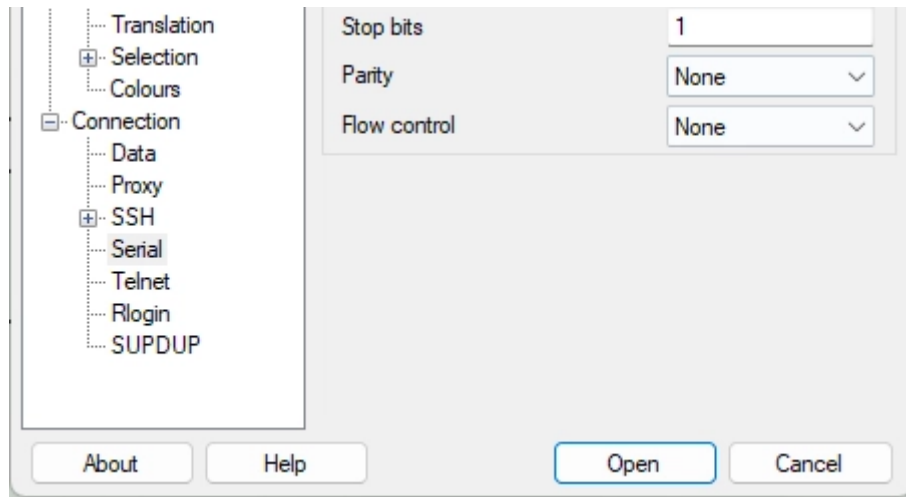
1. Download [Putty](#) and install it.
2. Plug the USB to TTL serial cable into the PC, check the **Device Manager** to find the COM number. Here, assume it is COM3.
3. Open Putty and set it up as follows:

- Select Session in the left column, set the serial line to COM3, baud rate to 1500000, and connection type to Serial.
- Write radxa-rock5 in the Saved Sessions column and click Save.



4. Select Serial at the bottom of the left column and configure it as follows:





5. After setting up, click Open to open the serial port. Make sure the TTL end is correctly connected, then turn on the power to the board.

FAQs

1. When using the debug console, the system startup information is displayed on the screen, but I cannot enter text using the keyboard? It may be that `Hardware Flow Control` is enabled by default. After turning off `Hardware Flow Control`, it should return to normal.

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