

CCtalk/USB Interface Technical Information.

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1. General description

The information contained in this document is specific to the CCtalk/USB interface.

For additional information on the CCtalk specification refer to: CCtalk Serial Communication Protocol, Generic Specification Iss 4.2 (www.cctalk.org)

2. Electrical description

2.1 Connector Pin-out

The connection between the Host machine and the interface, is made using a USB miniB cable and power cable.

1) The USB miniB connector pin-out is the following: CN1:UB-M5BR4R-DM14 (JST)

Pin	Function
1	VBUS
2	D-
3	D+
4	GND
5	GND

2) The Power connector pin-out is the following: CN3:S2B-XH-A (JST)

Pin	Function
1	+24V
2	GND

3) The CCtalk connector (option) is the following: CN5:DF1B-40P-2.5DS (HIROSE)

Pin	Function
1	DATA
2	GND
3	GND
4	+24V

4) The hopper connector is the following: CN2:B14B-PHDSS-B (JST)

Pin	Function
1	GND
2	+5V
3	MOTOR_CW
4	FULL (HIGH_LEVEL)
5	GND
6	+24V
7	TEST_SENS
8	MOTOR_CCW
9	+5V
10	COIN_OUT
11	GND
12	+5V
13	EMPTY (LOW_LEVEL)
14	GND

4. Installing USB Drivers (Virtual COM Port Drivers)

The Cctalk/USB interface uses the CP2101 as the Virtual COM PORT Controller. The Virtual COM Port Drivers for the CP2101 must be installed.

The CP2101 is an USB-to-UART bridge controller from Silicon Laboratories.

4.1 Extract all Virtual COM Port Drivers

Initial software setup requires running **CP2101_Drivers.exe** to extract all of the device drivers (Windows). After following the prompts, the utility will copy the driver files to a specified directory or the default directory. Each set of drivers will be extracted to an appropriately named directory, for example WIN.

4.2 Virtual COM Port Driver Installation Windows 2000

Follow these steps to install the Windows 2000 VCOM driver.

1. Connect the USB cable between the host computer and the USB interface.
2. Windows will open a “Found New Hardware Wizard” window. Press Next to continue.
3. Select “Search for a suitable driver for my device” (recommended) and press Next.
4. Check “Specify a location” and press Next.
5. Press Browse to locate the “slabbus.inf” driver installation file. The default location is the “C:\SilabsMCUCP2101WIN” directory. Once this file is selected press OK.
6. Verify that the correct path and filename are shown and press Next.
7. Press Finish to finish installing the “CP2101 USB Composite Device”.
8. Windows will open a second “Found New Hardware Wizard” window.

9. Select “Install from a list or specific location” (Advanced) and Press Next.
10. Select “Include this location in the search”.
11. Press Browse to locate the “slabbus.inf” driver installation file. Once this directory is selected press OK.
12. Verify that the correct path and filename are shown and press Next.
13. Press Finish to finish installing the “CP2101 USB to the UART Bridge Controller”.

4.3 Virtual COM Port Driver Installation Windows XP

Follow these steps to install the Windows XP VCOM driver.

1. Connect the USB cable between the host computer and the USB interface.
2. Windows will open a “Found New Hardware Wizard” window.
3. Select “Install from a list or specific location” (Advanced) and press Next.
4. Select “Include this location in the search”.
5. Press Browse to locate the “C:SiLabsMCUCP2101WIN” directory, select and press OK.
6. Verify that the correct path and filename are shown and press Next.
7. Press Finish to finish installing the “CP2101 USB Composite Device”.
8. Windows will open a second “Found New Hardware Wizard” window.
9. Select “Install from a list or specific location” (Advanced) and Press Next.
10. Select “Include this location in the search”.
11. Press Browse to locate the “C:SiLabsMCUCP2101WIN” directory. Once this directory is selected press OK.
12. Verify that the correct path and filename are shown and press Next.
13. Press Finish to finish installing the “CP2101 USB to UART Bridge Controller”.