

Diagram illustrating the connection of a USB-to-UART bridge module (CP2102) to a USB Type-C connector (J1).

**USB Type-C Connector (J1) Pins:**

- VBUS (+5V) connected to RST (pin 9) and VBUS (pin 8).
- D- (pin 5) and D+ (pin 4) connected to the IC.
- GND connected to SHIELD (pin 1) and GND (pin 10).

**CP2102 IC Pins:**

- RST (pin 9) connected to +5V.
- VBUS (pin 8) connected to +5V.
- D- (pin 5) and D+ (pin 4) connected to the IC.
- SUSPEND (pin 12) and SUSPEND (pin 11) connected to the module's EN (pin 3).
- TXD (pin 26) connected to CP-Tx (pin 2).
- RXD (pin 25) connected to CP-Rx (pin 3).
- RTS (pin 24) connected to RTS (pin 1).
- DTR (pin 28) connected to DTR (pin 2).
- GPIO0 (pin 6) connected to the module's GPIO0 (pin 6).
- CHREN (pin 13) connected to the module's G2 (pin 4).
- CHRO (pin 14) connected to the module's G1 (pin 5).
- CHR1 (pin 15) connected to the module's GPIO0 (pin 6).

**Module Pins:**

- EN (pin 3) connected to the module's EN (pin 3).
- RTS (pin 1) connected to the module's RTS (pin 1).
- DTR (pin 2) connected to the module's DTR (pin 2).
- GPIO0 (pin 6) connected to the module's GPIO0 (pin 6).

**Module Configuration Table:**

DTR	RTS	EN	GPIO0	Boot Mode
1	1	1	1	Flash Boot
1	1	0	1	System Down
0	1	0	0	UART0 Boot
0	0	1	1	Flash Boot

J2 Conn_01x08			
1	BTN_3	→	GND
2	BTN_3	→	3.3V
4	LCD_B/L		
5	RES		
6	SCK		
7	DC		
8	MOSI		

  

GPI032	GS_SDA	MPU_SDA
GPI033	GS_SCL	MPU_SCL
GPI07	MOSI	
GPI08	SCK	
GPI02	DC	
GPI04	RES	
GPI05	LCD_B/L	
GPI027	MIC_SCK	
GPI026	MIC_DATA	
GPI025	MIC_WS	
GPI014	SPEAKER_SCK	
GPI015	SPEAKER_WS	
GPI013	SPEAKER_DATA	
GPI020	RGB_LED	
GPI019	BTN_3	
GPI021	BTN_2	
GPI022	BTN_1	

[illegible]

Pin 1 to 5 connection diagram for PAJ7620U2:

- Pin 1: VIN
- Pin 2: GND
- Pin 3: GS\_SCL
- Pin 4: GS\_SDA
- Pin 5: INT

Power supply connections: 3V and GND.

PAJ7620U2

Diagram of the MSM26154030H0 IC. The IC is shown in a square package with pins 1 through 8. Pin 1 is GND, Pin 2 is NC, Pin 3 is NC, Pin 4 is WS, Pin 5 is EN, Pin 6 is VDD, Pin 7 is U4, Pin 8 is SCK. A capacitor C8 (0.1uF) is connected between pins 6 and 7. The circuit is powered by +3.3V and GND. The output is labeled MIC\_DATA and MIC\_SCK.

The diagram shows the MAX98357AETE+T IC connected to a 3.3V supply and ground. The IC has several pins: THERMAL\_PAD (17) to GND, ECL (16) to GND, GND\_3 (15) to GND, LRCLK (14) to N.C.\_4, N.C.\_4 (13) to N.C.\_3, N.C.\_3 (12) to GND, OUTN (11) to GND, and OUTP (10) to a speaker (LS1). The IC also has pins for SPEAKER\_SCK (1), SPEAKER\_WS (2), SPEAKER\_DATA (3), DIN (4), GAIN\_SLOT (5), GND\_1 (6), SD\_MODE (7), N.C.\_1 (8), VDD\_1 (9), VDD\_2 (10), N.C.\_2 (11), and VDD\_3 (12). The IC is labeled IC1 MAX98357AETE+T.

Diagram illustrating the connection for SW1 and SW2:

- SW1 is connected to Pin<sub>1</sub> of BTN<sub>1</sub>.
- SW2 is connected to Pin<sub>2</sub> of BTN<sub>2</sub>.
- Both Pin<sub>1</sub> and Pin<sub>2</sub> are pulled down to GND.