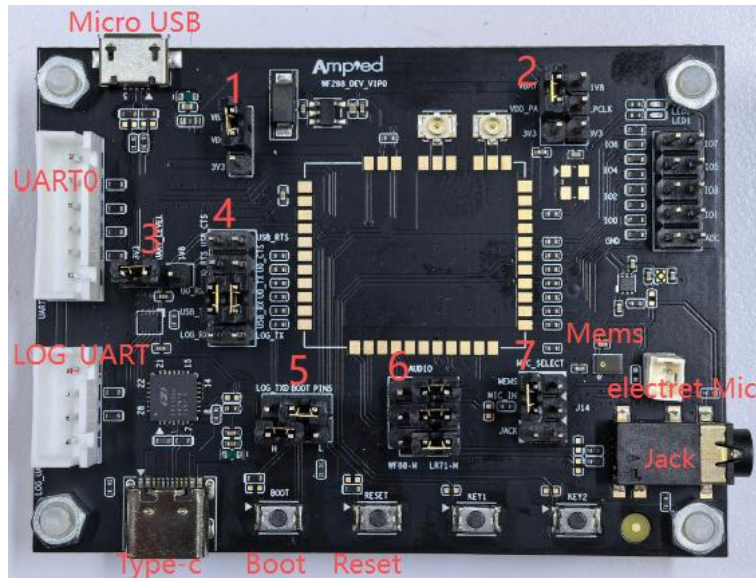


## WF288\_DEV

The WF288\_DEV development board supports four modules: WF88-EX, WF88-M, WF88-AW, and LR71-M. Different circuit configurations must be selected for different modules. The following sections describe each circuit part and provide guidance on jumper selection for each module.

### Introduction to WF288\_DEV Board



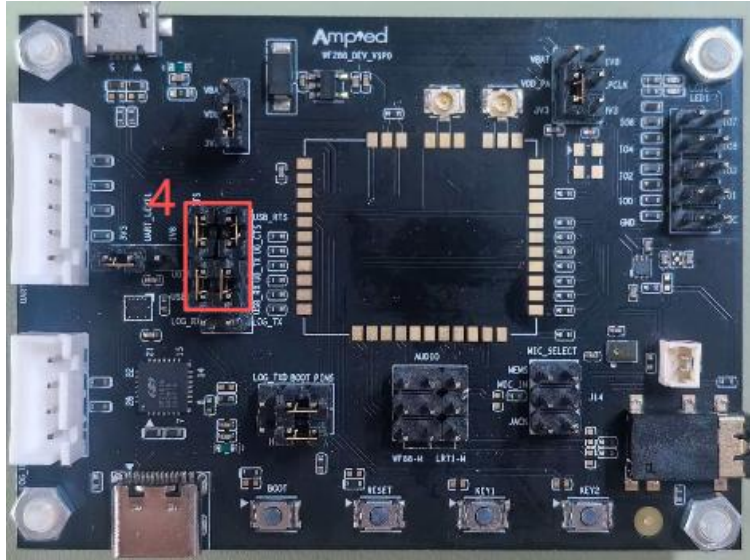
- 1) Micro USB: Power supply interface, as well as firmware burning interface.
- 2) Type-C: Power supply interface, as well as debugging serial port interface.
- 3) Boot: Boot button for downloading firmware.
- 4) Reset: System reset button.
- 5) White connectors (UART0 and LOG\_UART): External serial interfaces that connect directly to the module's serial pins without going through a serial converter chip.
- 6) Audio: Includes a headphone jack, a microphone (mic), and an electret microphone. The WF88-M and LR71-M support audio functionality.

### WF88-EX:

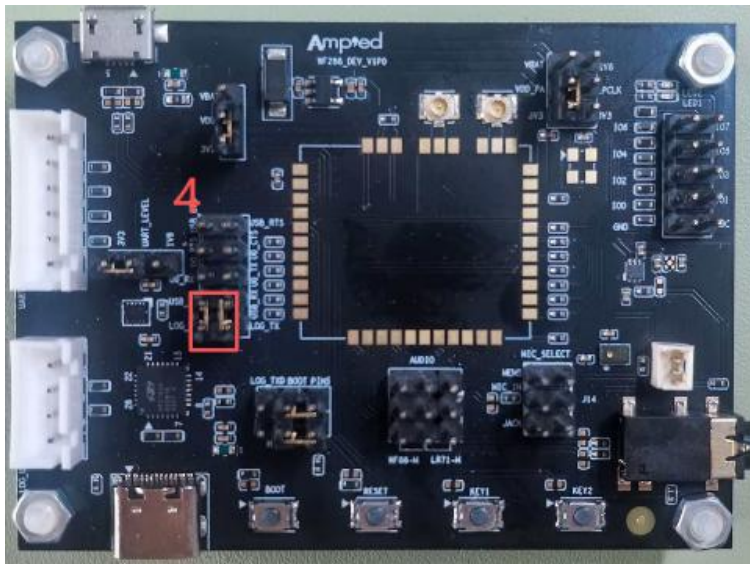
	USB_Download	UART0	LOG_UART	UART_LEVEL	VDD	VDDPA
WF88-EX	√	√	√	3.3V	3.3V	3.3V

1. Power supply selection: Set VDD (Position 1), VDDPA (Position 2) and UART\_LEVEL (Position 3) to 3.3V.
2. BOOT (Position 5): Select PIN5 and set it to low level.
3. If using an external serial port (white connector for UART0 and LOG\_UART), Position 4 must be left as NC (No Connect).
4. When using a Type-C USB-to-serial adapter with UART0, install the jumper at the position 4

as shown in the figure below.



- When using a Type-C USB-to-serial adapter with LOG\_UART, install the jumper at the position 4 as shown in the figure below.

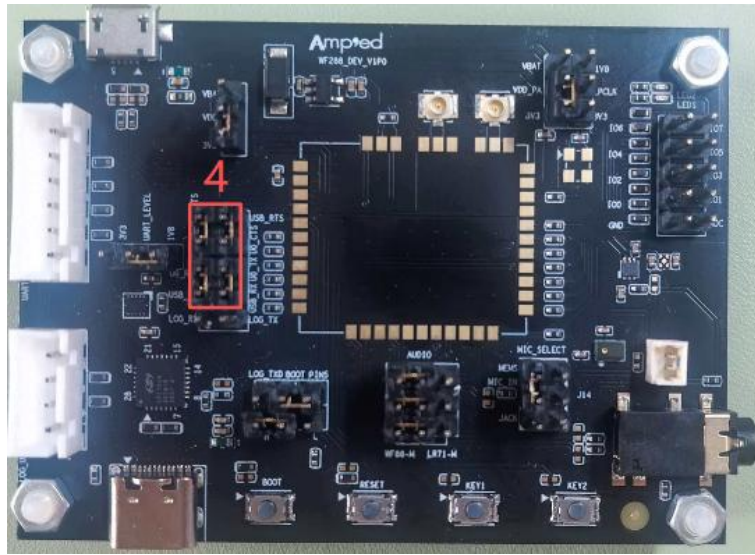


### WF88-M:

	USB_Download	UART0	LOG_UART	UART_LEVEL	VDD	VDDPA
WF88-M	X	√	X	1.8V	3.3V	3.3V

- Power supply selection: Set VDD (Position 1) and VDDPA (Position 2) to 3.3V, Set UART\_LEVEL (Position 3) to 1.8V.
- BOOT (Position 5): Select PIN5 and set it to high level.
- If using an external serial port (white connector for UART0), Position 4 must be left as NC (No Connect).

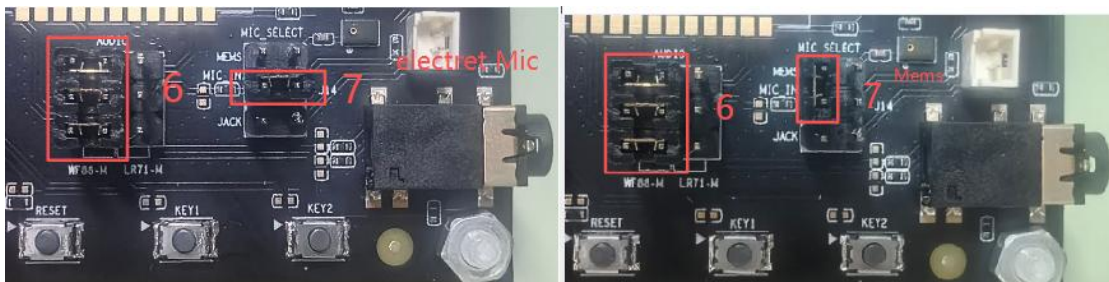
- When using a Type-C USB-to-serial adapter with UART0, install the jumper at the position 4 as shown in the figure below.



- Audio Section: Ensure the audio circuit on the module is soldered before use.

Reference Designator	Description
C13, C16, C80, C82, C84, C88, C89	1uF, 0201
C81, C83, C85	100nF, 0201

- When selecting the audio function, set Position 6 to WF88-M; for position 7, you can choose either a MEMS mic or an electret microphone, as shown in the figure.

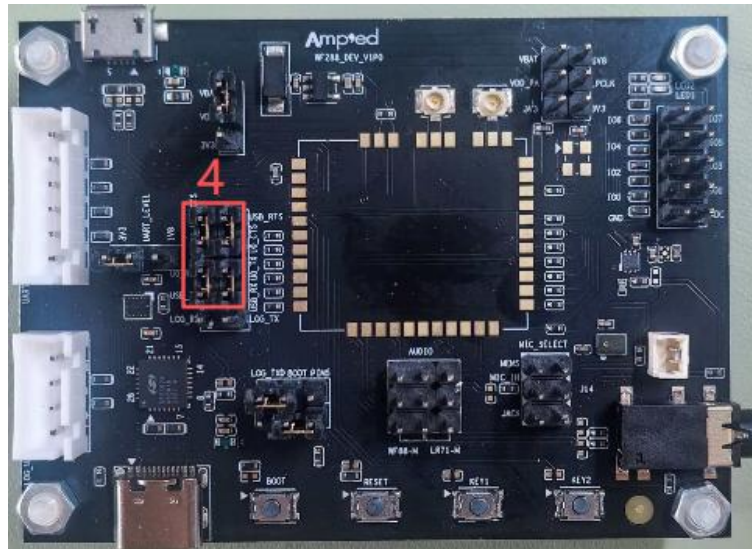


### WF88-AW:

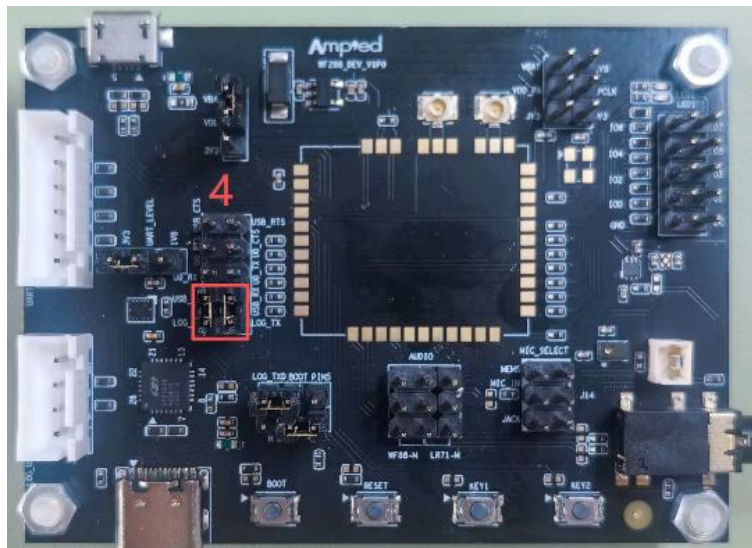
	USB_Download	UART0	LOG_UART	UART_LEVEL	VDD	VDDPA
WF88-AW	√	√	√	3.3V	VBAT	X

- Power supply selection: Set VDD (Position 1) to VBAT, set VDDPA (Position 2) NC, Set

- UART\_LEVEL (Position 3) to 3.3V.
- 2. BOOT (Position 5): Select LOG\_TXD and set it to low level.
- 3. If using an external serial port (white connector for UART0 and LOG\_UART), Position 4 must be left as NC (No Connect).
- 4. When using a Type-C USB-to-serial adapter with UART0, install the jumper at the position 4 as shown in the figure below.



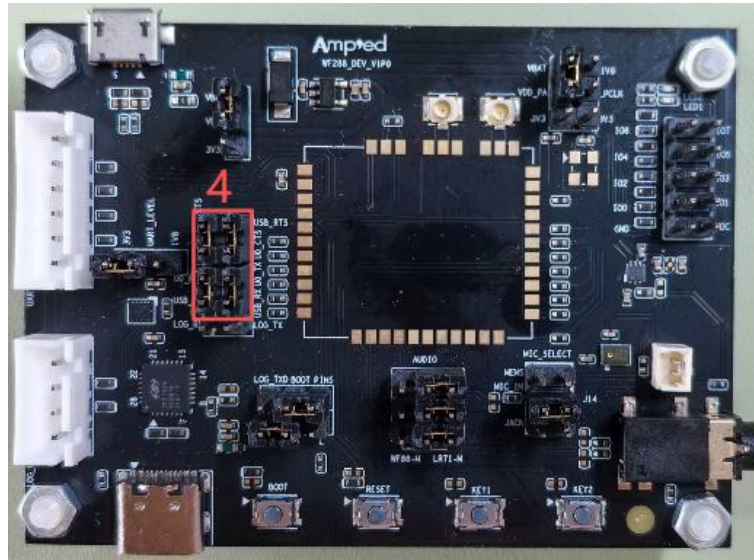
- 5. When using a Type-C USB-to-serial adapter with LOG\_UART, install the jumper at the position 4 as shown in the figure below.



**LM71-M:**

	USB_Download	UART0	LOG_UART	UART_LEVEL	VDD	VDDPA
LM71-M	X	√	X	3.3V	VBAT	3.3V/VBAT

1. Power supply selection: Set VDD (Position 1) to VBAT, VDDPA (Position 2) to 3.3V or VBAT, and Set UART\_LEVEL (Position 3) to 3.3V.
2. BOOT (Position 5): Select PIN5 and set it to high level.
3. If using an external serial port (white connector for UART0), Position 4 must be left as NC (No Connect).
4. When using a Type-C USB-to-serial adapter with UART0, install the jumper at the position 4 as shown in the figure below.



5. Audio part: When selecting the audio function, set Position 6 to LR71-M; for Position 7, you can choose either a MEMS microphone or an electret microphone. On the module, if R45 and R46 are NC (no connect), the onboard MEMS mic can be used. If R45 and R46 are 2.2K $\Omega$ , an external electret microphone should be selected.

