CHANGING THE MODES OF MOD-WIFI-ESP8266

REFERENCE

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Designed by OLIMEX Ltd, 2014

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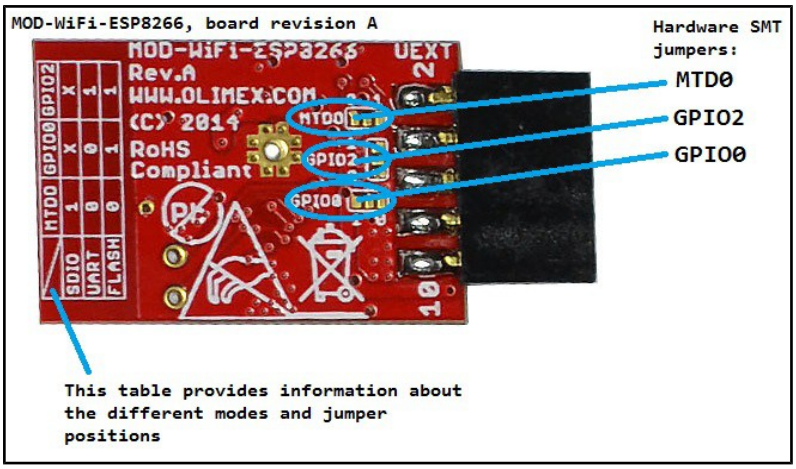
ESP8266 has three modes of operation: SDIO mode, UART mode and FLASH mode. By default the board is configured for FLASH mode operation. The jumpers for the default FLASH mode were set during production as follows: MTD0 is set to position 0; GPIO0 is set to position 1; GPIO2 is set to position 1.

To access the other modes you would need to manipulate the on-board SMT jumpers called MTD0, GPIO0, and GPIO2. They are located at the bottom of the board near the UEXT connector. Each of the jumpers can be set to either position 0 or position 1. The jumpers are highlighted on the picture below:



The positions for the all the modes are printed on the board itself. The table looks like this:

MODE / JUMPER	MTDO	GPIO0	GPIO2
SDIO	1	x	x
UART	0	0	1
FLASH (DEFAULT)	0	1	1

For example:

Initially, you can't update the firmware of MOD-WIFI-ESP8266 since by the board starts in the default FLASH mode. In order to update the firmware of the board you would need to change the starting mode to UART. This is done by changing the position of the jumper named GPIO0 to 0. After the update is done – change the position of GPIO0 back to 1 again.

In order to change the position of an SMT jumper like that you would need basic soldering skills. There are two things that you would need to do:

1. Remove the original connection between the pads. If it was made using soldering – unsolder it and remove the soldering residue. If it was a hardware PCB connection – make sure to cut between the pads with a sharp tool (like a safety cutter).

2. Connect the pads of the desired position by soldering. Do not use a large amount of soldering residue. Do not keep the soldering iron pressed to the board longer than 10 seconds. Make sure that there is no left-over soldering residue which might lead to accidental short-circuits.

If you want, you can add wires and a PTH jumper or a slide switch to the pads of the jumpers. This would allow easier change of the jumpers in future.

More details about the three different modes might be found in the ESP8266 datasheet.

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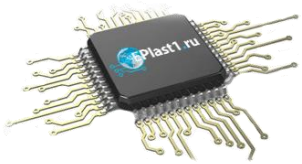

Как с нами связаться

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