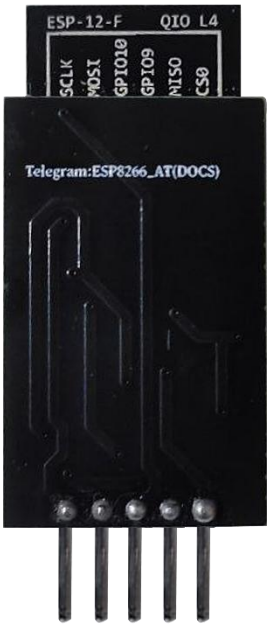
ElectroByte
Perfection Through Inspection

ESP8266 Embedded Wi-Fi Serial Communication Module

AT command



Pins		
5v	Connect to 5v power	
GND	GND	
TX	Connect it to the RX of MCU	UART
RX	Connect it to the TX of MCU	
G0	NC	

Note: when you powered the module make sure that G0 pin not connected to anything

Please visit the channel to see all update and upgrade

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Commands list

WICON	WISTA	WIIP	BAUD
HTGET	HTPOST	VERSION	RESET
DEFUALT	CHECKUPDATE	UPDATE	FSREAD
FSREMOVE	FSLIST	FSADD	FSWRITE
MACADDR	NOWINIT	NOWDEINIT	NOWADD
NOWSEND			

All command above should be written with this way:

AT+<COMMAND>

all commends are case-sensitive so don't use small case with it**,**

Command Details

When you want to deals and comminutes with the module you need to know which commands you should use.

Here are the commands:

1. Test the module.

   test the serial connection is Ok

Command	Response	Parameters
AT	OK	None

2. Reset the module.
   reboot the module

Command	Response	Parameters
AT+RESET	OK	None

3. Reset setting to default

Command	Response	Parameters
AT+DEFUALT	OK	None

The default data are: SSID and PASSWORD are empty and the baud rate: 9600 bps

4. Check if there is an update or note

Command	Response	Parameters
AT+CHECKUPDATE	If not connected to Wi-Fi **WIFI NOT CONNECTED** If there is an update **THERE IS UPDATE AVIALBLE: <version>** Else **THERE IS NO UPDATE AVIALBLE**	None

5. Update the firmware

Command	Response	Parameters
AT+UPDATE	If not connected to Wi-Fi **WIFI NOT CONNECTED** If there is an update It will start downloading new Firewarm immediately Else **THERE IS NO UPDATE AVIALBLE**	None

When start updating it will appear the percent of progress, please don't Shutdown the module while updating

6. Wi-Fi Connection

Connect the module to Wi-Fi use the following command as below.

Read command **AT+WICON?**	Response - **<SSID>,<PASS>** when Wi-Fi is connected

	- **NO WIFI CONNECTED** when Wi-Fi is not connected
	Parameters **None**
	Note **None**
Write command **AT+WICON=<SSID>, <PASS>**	Response **OK**
	Parameters **SSID**: the name of the Wi-Fi network wants to connect. **PASS**: the password of SSID. When they left empty it will be disconnected from Wi-Fi network
	Note - It takes several times for connecting. - When the module is not connecting to the Wi-Fi, it will blink for 0.1 sec - When the module is connecting to the Wi-Fi, it will blink for 2 sec

7. Wi-Fi IP Address

   When the module is connected to the Wi-Fi, it has an IP address

Read Command **AT+WIFIP?**	Response **<IP Address>**
	Parameters **None**
	Note **None**

8. Baud rate Serial communication

Read Command **AT+BAUD?**	Response **<Baud rate>**
	Parameters **None**
	Note

	None
write Command **AT+BAUD=< NUMBER >**	Response **OK**
	Parameters **NUMBER** 1 for 9600 bps 2 for 38400 bps 3 for 115200 bps
	Note - Be careful when changing the speed because you will not be able to communicate with module until you change the speed with your program

9. Version of firmware

Read Command **AT+VERSION?**	Response **ESP8266 ATCOMMAND <VERSION>**
	Parameters **None**
	Note **None**

10. GET http request

You can make http request with get method

Write Command **AT+HTGET=<URL>**	Response **<HTTP CODE>, <HTTP RESPONSE>**
	Parameters **URL:** the site or URL you want to make http request for
	Note - To use this command, you have to connect to Wi-Fi which has an internet access

11. POST http request

You can make http request with POST method

Write Command **AT+HTPOST=<URL>, <DATA>**	Response **<HTTP CODE>, <HTTP RESPONSE>**
	Parameters **URL:** the site or URL you want to make http request for **DATA**: the data you want to send as string
	Note - To use this command, you have to connect to Wi-Fi which has an internet access

12. List the files.

There are files in memory as SPIFFS or LittleFS.

Read Command
AT+FSLIST?
	Response
	
	if there any file:
	<name File>, <size in byte>
	else:
	NO FILE EXIST

	Parameters **None**
	Note - You will get the sequence of response depend on count of exists files

13. Read data in files

Write Command **AT+FSREAD=<FILE NAME>**	Response If the file is existing you will get **< file content>** Else YOU WILL GET **ERROR NOT FOUND**

	Parameters **FILE NAME:** full name of file with extension
	Note **None**

14. Write data into files

Write Command **AT+FSWRITE=<FILE NAME>, <FILE CONETNET>**	Response **OK**
	Parameters **FILE NAME:** full name of file with extension **FILE CONETNET:** the content of file you want to be saved
	Note - In writing method if the file doesn't exist, it will create the file and store the data - In writing method if the file exists, it will overwrite the data so the old data will be deleted and will be replaced with the new **<FILE CONTENT>**

15.add data into files

Write Command **AT+FSADD=<FILE NAME>, <FILE CONETNET>**	Response **OK**
	Parameters **FILE NAME:** full name of file with extension **FILE CONETNET:** the content of file you want to be saved
	Note - In adding method if the file doesn't exist, it will create the file and store the data - In adding method if the file is exist it will append the data so the old

	data won't be deleted and will be replaced with the new **<FILE CONTENT>**

16. remove files

Write Command **AT+FSREMOVE=<FILE NAME>**	Response If file exists **OK** else **ERROR NOT FOUND**
	Parameters **FILE NAME:** full name of file with extension - if you pass keyword **ALL** it will delete all the files exist in the memory
	Note - In adding method if the file doesn't exist, it will create the file and store the data - In adding method if the file exists it will append the data so the old data won't be deleted and will be replaced with the new **<FILE CONTENT>**

17. Get the MAC address of the device

Command	Response	Parameters
AT+MACADDR?	Return MAC address with this formula xx:xx:xx:xx:xx:xx	None

18. ESP-NOW initialize

Command	Response	Parameters
AT+NOWINIT	if it initializes without error **Init ESP-NOW done** Else	None

	Error initializing ESP-NOW	

This command will begin the ESP-NOW protocol

19. ESP-NOW DE initialize

Command	Response	Parameters
AT+NOWDEINIT	**OK**	None

20. Add MAC address of device for make a connection with ESP-NOW

AT+NOWADD=<MAC address>	Response If the adding is done without error **OK** else **Failed to add peer**
	Parameters **MAC address:** the Mac address to connect with ESP-NOW -
	Note **None**

21. Send data over ESP-NOW protocol

AT+NOWSEND=<DATA>	Response If the message has arrived it will return **OK** else **ERROR RECEIVE**
	Parameters **MAC address:** the Mac address to connect with ESP-NOW -
	Note

	- When the device receives the data, it will send the received data direct to serial with this formula **NOWDATA=<DATA>** - When the device trying to connect to Wi-Fi, it will affect to ESP-NOW connection until Wi-Fi connection stabilizes