

PROJECT!!!

Perhaps someone will see another application for such a device, but I assure you that the device was not created with the purpose of secretly obtaining information, and any such attempt will be prosecuted.

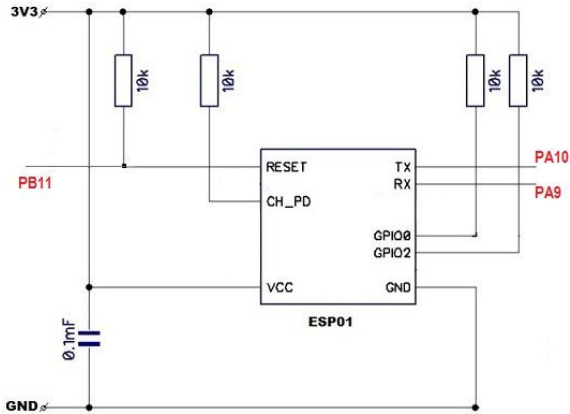
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The project settings were made in the STM32CubeMX environment (wifi\_mic.ioc file). A report was also generated as a PDF file, where you can see all the settings of wifi\_mic.pdf.

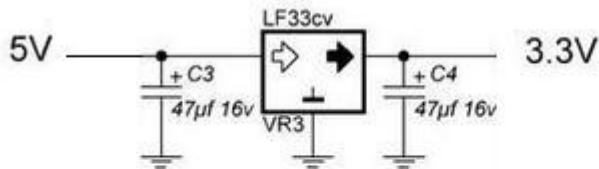
Connection table

Microcontroller stm32f103c8t6	External connections
PA9	ESP8266 ESP01 RX
PA10	ESP8266 ESP01 TX
PB11	ESP8266 ESP01 RESET
PB0	MAX9814 OUT
PC13	LED

Wiring diagram ESP01.

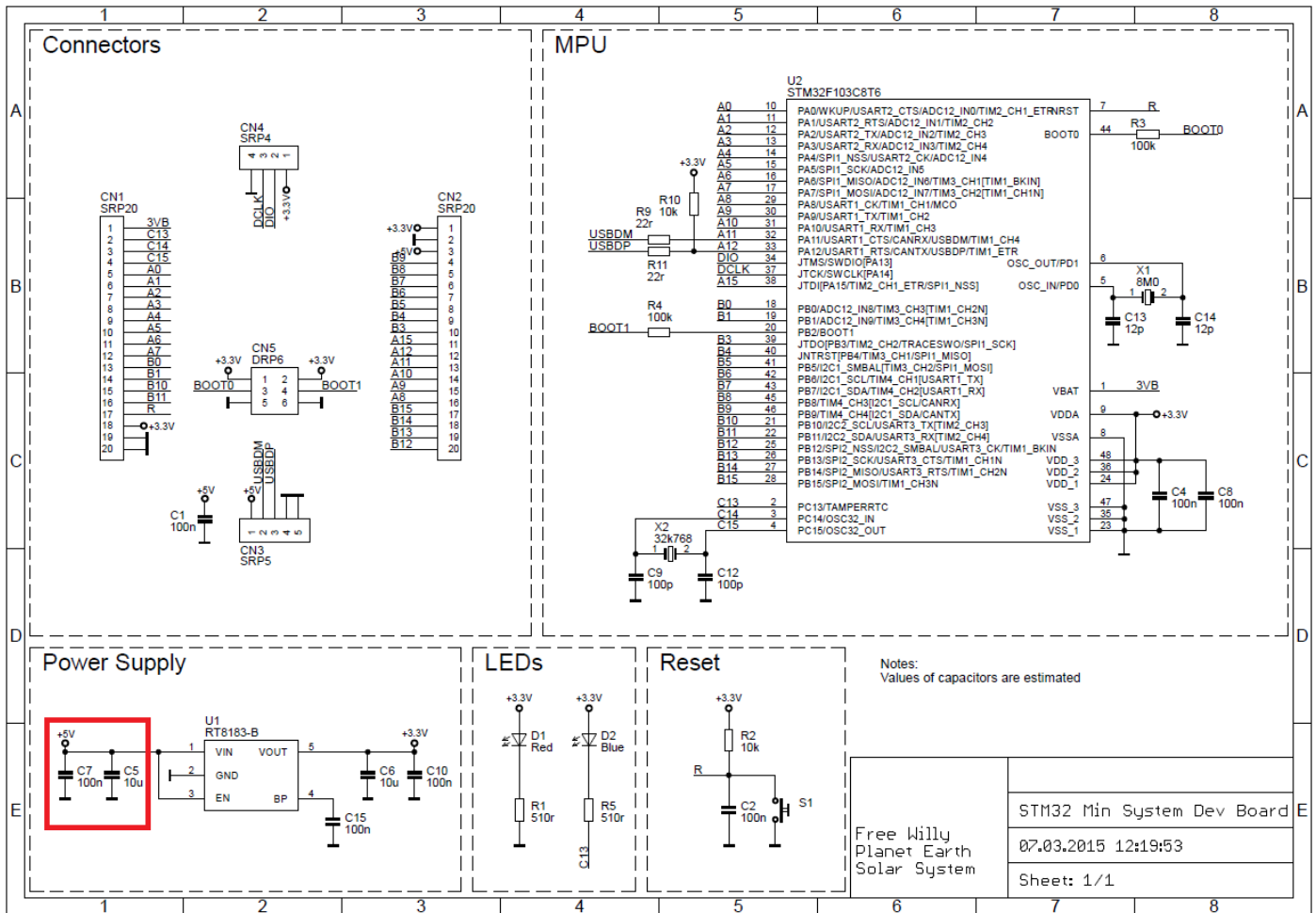


For esp01 you need a separate power supply !!! 3.3V stabilizer



Отдельное питания для ESP01!!!

от конденсатора  
C7 берем +5В!!!



The keil uvision5 environment was used to build and write the project. If the project is built without errors and the device is assembled. Change the settings of the access point (AP\_NAME \ PASSWORD), IP address and Port of the server in the project.

```
#define conect_to_AP "AT+CWJAP=\"AP_NAME\", \"PASSWORD\"\\r\\n"
#define serverPort 1222
#define server_Ip "192.168.1.176"
```

Open the python script "wifi\_mic\_ESP01\_AT.py".

- 1.Port settings, must match the wifi microphone settings. sock.bind(("", 1222))
2. You can also change the record length record\_len = 15 # 15 seconds.
- 3.Loudness level volume = 10 // multiplier

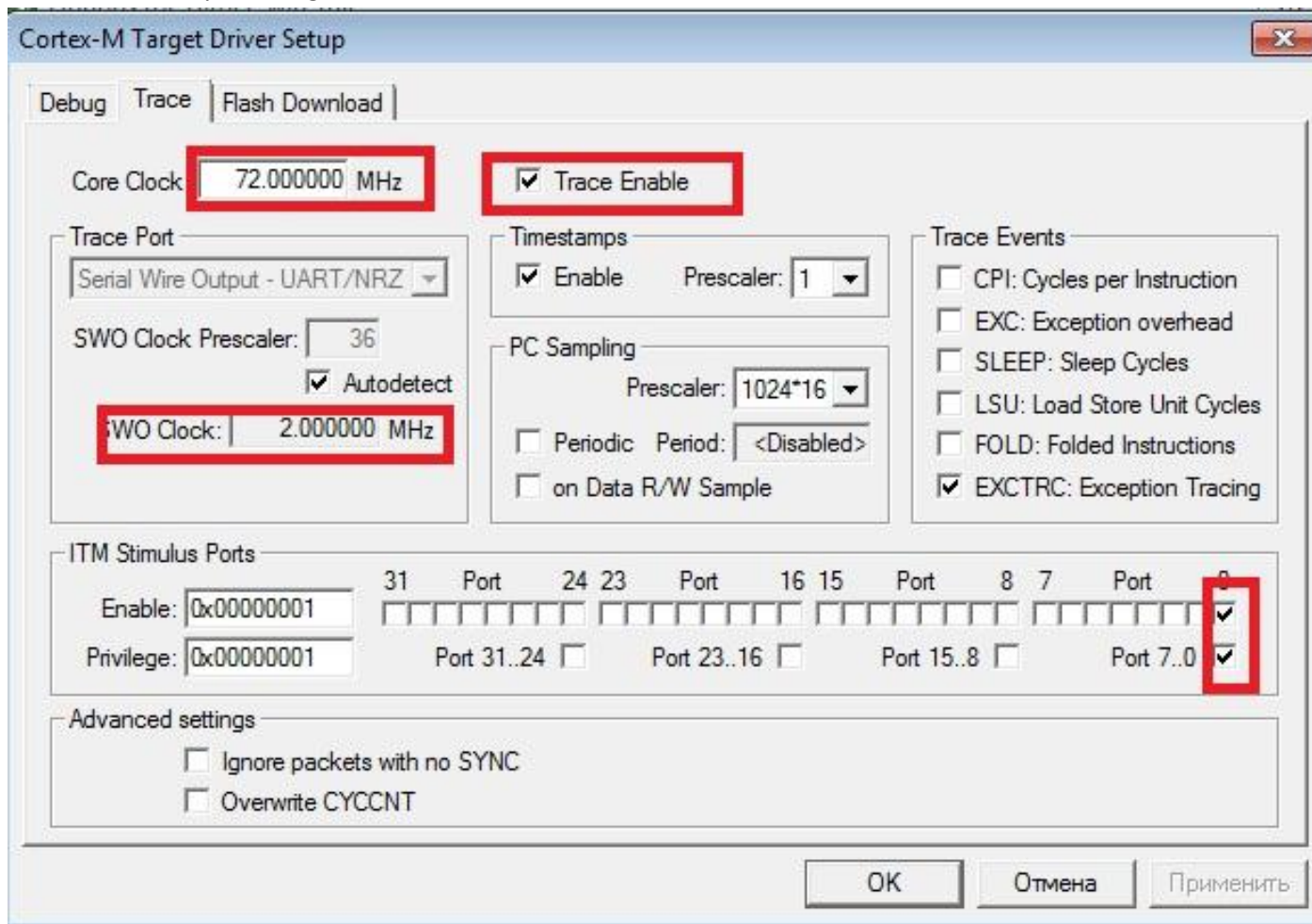
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If you repeated the project, but it does not work?

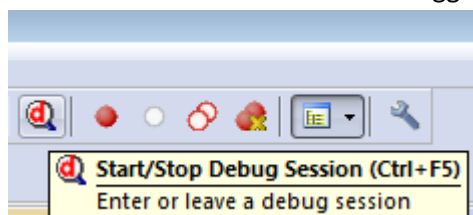
For diagnostics, we use SWO about it, I told you in this video <https://youtu.be/anop2wrf5rU>

In the program during its operation, you can see debug messages through SWO. To do this, include them #define DEBUG 1 line 43.

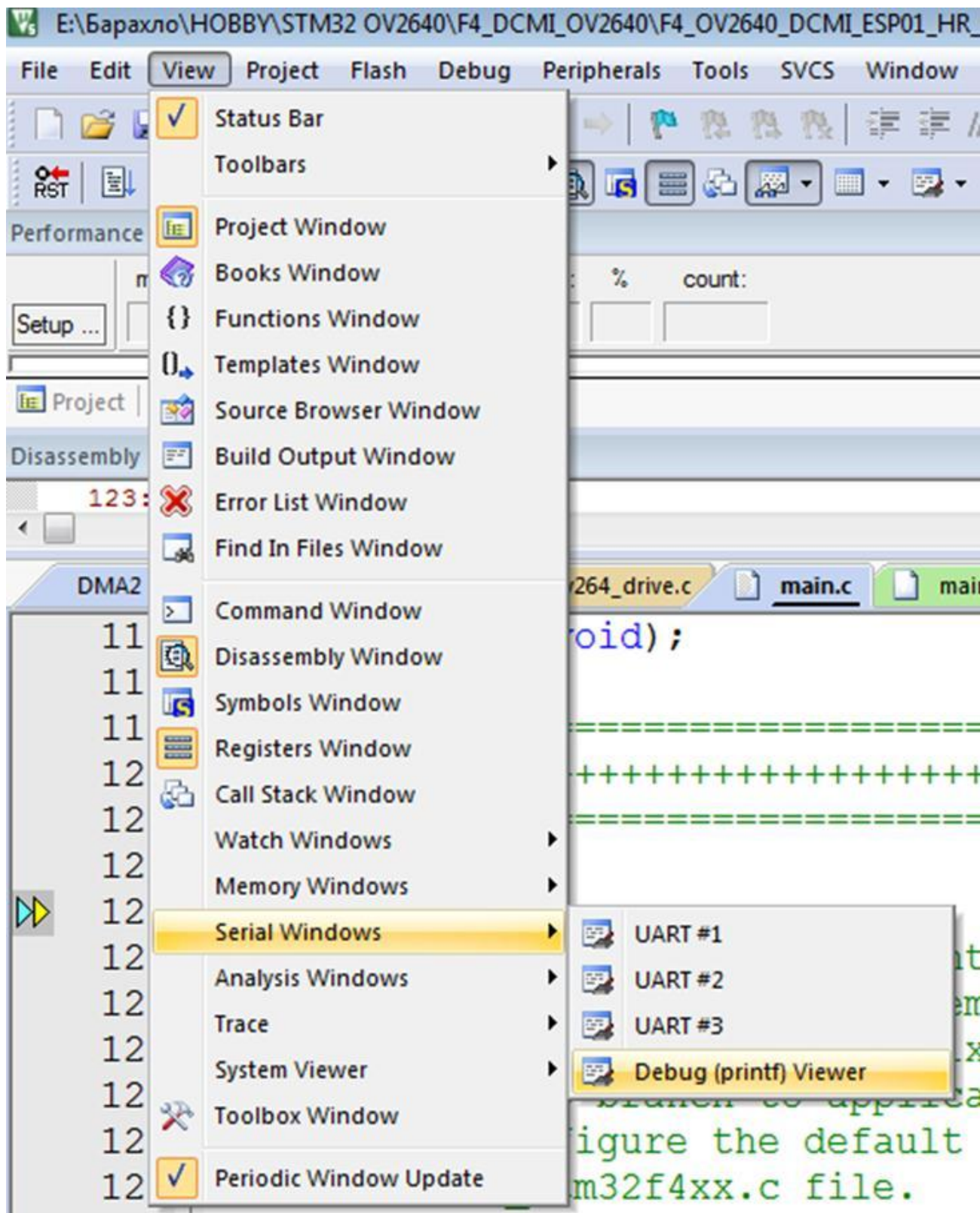
It is also necessary to configure it in KEIL as follows !!!



The board is connected to the debugger and external power is supplied to the board !!! We start the debugger



Call the next menu item



For example, normal logs are:

```
while ESP01 module ready
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find OK;
step 1: send_string(echoOff)
find OK;
step 2: send_string(station_mode)
find OK;
step 3: send_string(conect_to_AP)
```

find WIFI CONNECTED;  
step 4: send\_string(conect\_to\_AP\_status)  
find OK;  
step 5: send\_string(get\_IP)  
find OK;  
step 6: send\_string(NoMultConn)  
find OK;  
step 7: connect to the server tx: AT+CIPSTART="TCP","192.168.1.176",1222  
find CONNECT;  
step 0: send\_uartFastbaud tx  
find OK;  
step 8: enable transparent transmission mode tx

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Details for the assembly of the project:

1. st\_link программатор отладчик <http://ali.pub/312wfw>
2. microcontroller board stm32f103c8t6 <http://ali.pub/2silgs>
3. microphone module <http://ali.pub/3mqe3a>

The rest can be bought at the local radio market.

Ask all incomprehensible questions under this video in the comments!!! <https://youtu.be/S3VcAuqYoFA>