WiFi Firmware Developing User Guide

V1.1

Sentry2 has an ESP8285 WiFi chip, adopts the same kernel as ESP8266, which can be programmed by Arduino IDE. This paper will introduce how to configure ESP8285 Arduino development environment and how to upload firmware.

Download and install Arduino IDE:

https://downloads.arduino.cc/arduino-1.8.19-windows.exe

Run Arduino IDE and Open "File" > "Preference"



Input the URL to "Additional Boards Manager URLs" and click "OK"

http://arduino.esp8266.com/stable/package esp8266com index.json

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Open"Tools">"Board">"Boards Manager"

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Search "esp8266" and click "Install"

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Open "Tools">"Board">"ESP8266">"Generic ESP8285 Module"

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Open "File">"Examples">"ESP8266">"Blink"

Connect Sentry2 to PC via an USB-TypeC cable. Open "Tools" and do seme settings as shown in the bellow

Buildin Led: "4"

CPU Frequency: "80MHz" or "160MHz"

Upload Speed: "57600"

Reset Method: "no dtr (aka ck)"

Poart: "COM xx"(The USB Com Port)

Blink Arduind	o 1.8.19			- 🗆	×
File Edit Sketch	Tools Help				
	Auto Format	Ctrl+T			
	Archive Sketch				
Blink	Fix Encoding & Reload				
18 /*	Manage Libraries	Ctrl+Shift+I			^
2 ESP8266	Serial Monitor	Ctrl+Shift+M			
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6 The blue	Board: "Generic ESP8285 Module"	>			
7 (which :	Builtin Led: "4"	>			
8	Upload Speed: "57600"	>			
9 Note tha	CPU Frequency: "160 MHz"	>			
11	Crystal Frequency: "26 MHz"	>			
12 void setur	Flash Size: "1MB (FS:64KB OTA:~470KB)"	>			
13 pinMode	Reset Method: "no dtr (aka ck)"	> ou	t		
14 }	Debug port: "Disabled"	3			
15	Debug Level: "None"	>			
16 // the loc	wiP Variant: "v2 Lower Memory"	>			
1/D void loop	VTables: "Flash"	age level			
19 // but a C++ Exceptions: "Disabled (new aborts on oom)"			ago ioroi		
20 // it is Stack Protection: "Disabled"					
21 delay(10	delay (1) Erase Flash: "Only Sketch"				
22 digital Espressif FW: "nonos-sdk 2.2.1+100 (190703)"			H		
23 delay (2) SSL Support: "All SSL ciphers (most compatible)"			ctive low LED)		
24 } MMU: "32KB cache + 32KB IRAM (balanced)"					
	Non-32-Bit Access: "Use pgm_read macros for IRAM,	PROGMEM"			
	Port: "COM16"	,			
	Get Board Info				~
	Programmer	>			1
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nted), Use pgm_read m	acros for IRAM/PROGMEM, no dtr (aka ck), 26 MHz, 1MB (FS:64KB OTA:~470	IKB), 4, nonos-sdk 2.2.1+100 (190703), v2	2 Lower Memory, Disabled, None, Or	nly Sketch, 57600 on Q	COM16

Push the Stick button downward and hold it *(NOT ENTER Press)*, Click "upload" to start compiling and uploading, hold the Stick button downward until the screen shows the xx% progress.



- 1. Push and hold the Stick downward
- 2. Click the "Upload" on Arduino IDE



Wait firmware uploading until 100%

Done uploading.	
Writing at 0x00020000 (75 %) Writing at 0x00028000 (83 %) Writing at 0x00028000 (191 %) Writing at 0x0002c000 (100 %) Wrote 265088 bytes (1950 13 compre ssed) at 0x00000000 in 34.4 seconds (effective 61.7 kbit/s) Hash of data verified.	^
Leaving Soft resetting	~
nted), Use pgm_read macros for IRAM/PROGMEM, no dtr (aka ck), 26 MHz, 1MB (FS:64KB OTA:~470KB), 4, nonos-sdk 2.2.1+100 (190703), v2 Lower Memory, Disabled, None, Only Sketch, 57600 on COM1	3

Restart the Sentry and runs the "Custom" vision, the Blue WiFi LED will be keep bright and the Custom LED will be blink.

Support: support@aitosee.com

Sales: sales@aitosee.com

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FCC Caution:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.