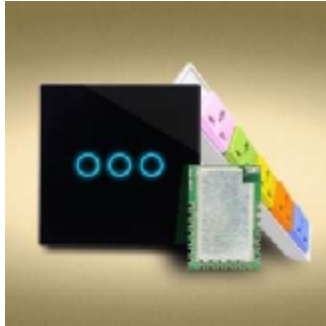


PSB Series Smart Switch Module

Overview



PSB series is a high integration and general multichannel smart switch module designed for wifi patch board and wifi switch. With peripheral circuit like external power supply, relay, button accessing, manufactures can make use of this module to develop and produce smart patch board or smart switch without any coding. PSB series module is capable of auto-searching and auto-connecting wifi, communicating with cloud server, being control by phone APP etc. PSB series includes several models; each of them supports different servers and different smartphone end APPs.

Functions

- Support easy configure SSID and wifi password through phone APP
- Support auto-connecting to IoTgo server, register product and update status
- Support remote monitor and control by phone APP
- Support setting timing task by phone APP (once or repeat is optional)

Features

- Mini size, easy to installed into any shell
- External antenna/ceramic antenna (optional)
- High integration, no coding need

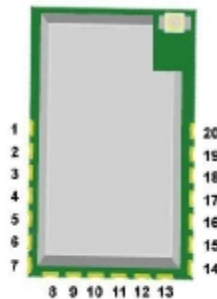
Specification

PCB Size	29.21*20.32*1.00mm
Power supply	3.3V
Power supply (limits)	3.6V DC(MAX)

Electrical Characteristics

Characteristics	Symbol	Min	Typ	Max	Unit
Power supply voltage	VDD	3.0	3.3	3.6	V
Output High Voltage	(IOH = -10 mA)	-	VDD-0.8	-	V
High input voltage	VIH	2.0	-	VDD	V
Low input voltage	VIL	0	-	0.8	V
Operation current for VDD	IDD	-	-	280	mA

Pin Map



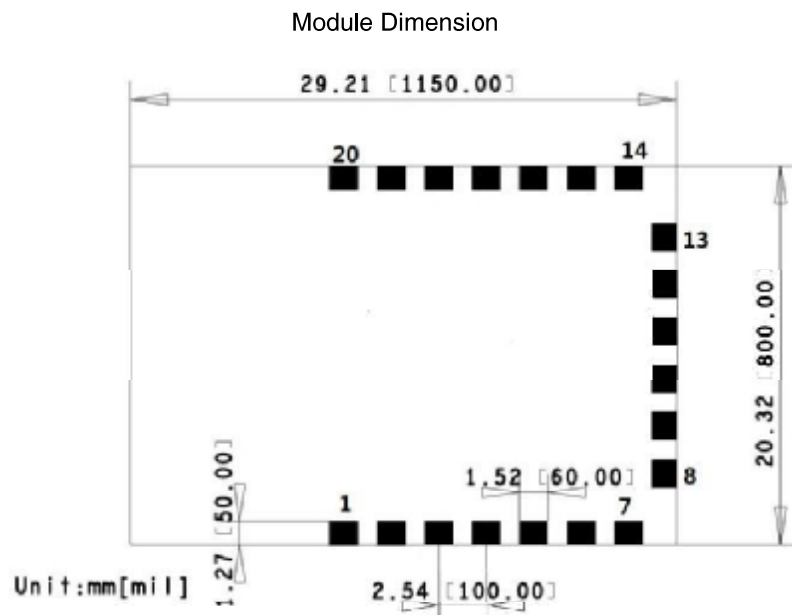
Pin Index	Pin Name	Description
1	NC	No connection
2	NC	No connection
3	SLED	Net Status Indicators ● Stay ON – normal work ● Repeat ON 100ms, OFF 1900ms – cannot connect to WiFi spot ● Repeat ON 100ms, OFF 100ms, ON 100ms, OFF 1700ms - cannot connect to server ● Repeat ON 100ms, OFF 1000ms – device connects to server, but doesn't register to the corresponding account in server ● Repeat ON 100ms, OFF 100ms – enter into SSID configuration mode
4	NC	No connection
5	NC	No connection
6	KEY3	Local switch button 3 – use for RELAY3 local controlling and enabling switch turn on and off.
7	KEY4	Local switch button 4 – use for RELAY3 local controlling and enabling switch turn on and off.
8	NC	No connection
9	RELAY4	Connect to RELAY 4 – enable the channel 4 socket or switch turning on and off
10	RELAY3	Connect to RELAY 3 – enable the channel 4 socket or switch turning on and off

11	RELAY2	Connect to RELAY 2 – enable the channel 4 socket or switch turning on and off
12	RELAY1	Connect to RELAY 1 – enable the channel 4 socket or switch turning on and off
13	GND	Module power pin
14	KEY2	Local switch button 2 – use for RELAY3 local controlling and enabling switch turn on and off.
15	KEY1	Local switch button 1 – use for RELAY3 local controlling and enabling switch turn on and off.
16	3V3	Module power pin
17	NC	No connection
18	NC	No connection
19	GND	Module power pin
20	NC	No connection

Note:

- All KEY pins default input is High, take effect when Low. Long press (more than 5s), enter into the configure mode. Change the status of switch by pressing the local button.

Layout Guide



Peripheral Circuit Design reference

Schematic & Design files can be downloaded at pas.itead.cc

Support APP Download and Directions



1.注册登录后选择“添加设备”



2.自动搜索到模块, 为模块配置wifi密码



3.为插座取名, 添加设备成功



4.简单三步即可实现远程控制



5.实现开/关状态实时同步监控



6.支持进行定时操作设置

1. Login and click “Add device”
2. Auto-searching module, and configure WiFi hot spot for the module
3. Name your device and submit
4. Device added successfully
5. Device status sync to your App
6. Set timing to control device

* Beta Android App download - <http://iotgo.itead.cn/android.apk>

* Official Android/IOS app download, please contact to ITEAD

Value-added Service

*Baseboard Customization

ITEAD has developed hundreds of baseboards to carry various SoMs. According to customer actual needs, we can design

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www.itead.cn

and develop the custom baseboard of PSB series module. The custom baseboard can be embedded in your products without your any extra labor and time. We charge the hardware design fee, but the design fee will be favorable if customer purchases in bulk. Design fee will be even free if purchase quantity exceeds a certain amount.

We provide a public model design for your reference as well.

***Brand APP Customization**

If customer needs a brand app to control your product with PSB module embedded, we will design the exclusive custom APP for your brand according to your requirements. The custom APP will definitely increase your brand awareness. Certainly, we charge the APP design fee, but the design fee will be favorable if customer purchases in bulk. Design fee will be even free if purchase quantity exceeds a certain amount.

- We provide a free app for module users.

***Could Server Device Monitor**

We can provide a custom monitor server for our customers. So customer can check the active products number, register number, and products online status. The monitor allows customers to send some promotional messages to users end. If customer needs server custom service, it will charge you server development fee and monthly maintain fee.

- Now, the server we provide for customer is free, and guarantees all devices in server running normally but the monitor right not accessible.

Note: This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

15.105 Information to the user.

(b) For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination.

The firmware setting is not accessible by the end user.

The final end product must be labelled in a visible area with the following:

“Contains Transmitter Module 2AE2JPSB-B”