

文件编号 Document No.		文件名称 Document Name	产品/工艺变更通知 Product/Process Change Notice(PCN)
文件版本 Document Version	中文/A1	保存期限 Retention Period	3 年 3 years

主题: 关于 ESP32-S 模组 AT 固件变更通知函
 Main Topic:

PCN 编号 PCN No.	0132 号	提出日期 Issue Date of PCN	2020-03-14
产品名称 Product Name	Wi-Fi 模组(型号 ESP32-S)	变更日期 Proposed Date of Change	2020-03-14
封装类型 Package Type	模组 Module	首次出货日期 Proposed Date of First Shipment	2020-03-15

客户批准/Customer Consent: 需要批准/Approval Required
通知, 无需批准/Notification, Approval Not Required

变更等级/Classification of Change: 主要变更/Major
轻微变更/Minor

变更原因/Reason for Change:
 固件版本更新:
 (1) 新增加指令: 基础指令、Wi-Fi 指令、TCP/IP 指令、BLE 指令、Classic Bluetooth 指令、MQTT command、HTTP command;
Base command
 AT+SYSROLLBACK: Roll back to the previous firmware.
 AT+SYSTIMESTAMP: Set local time stamp.
Wi-Fi command
 AT+CWHOSTNAME: Configures the host name of ESP station
 AT+CWQIF: Disconnect station from the ESP softAP.
 Update command AT+CWJAP, add a parameter of listen interval
TCP/IP command
 AT+CIPSTARTEX: Establishes TCP connection, UDP transmission or SSL connection by auto assigning ID.
 AT+CIPSSLCONF: Config SSL client.
 AT+CIPRECONNINTV: Set the interval of auto-reconnecting in Wi-Fi UART passthrough mode.
 AT+CIPRECVMODE: Set socket receive Mode.
 AT+CIPRECVDATA: Get socket data in passive receive mode.
 AT+CIPRECVLEN: Get socket data length in passive receive mode.
 AT+PING: Ping packets
 AT+CIPDNS: Configures Domain Name System. The configuration will be saved in flash
 Update command AT+CIUPDATE, support SSL OTA and version parameter
BLE command
 AT+BLESETKEY: Set BLE static pair key
 AT+BLEHIDINIT: BLE HID device profile initialization
 AT+BLEHIDKB: Send BLE HID Keyboard information
 AT+BLEHIDMUS: Send BLE HID mouse information

AT+BLEHIDCONSUMER: Send BLE HID consumer information

Classic Bluetooth command

AT+BTINIT : Classic Bluetooth initialization

AT+BTNAME : Sets BT device's name

AT+BTSCANMODE : Sets BT SCAN mode

AT+BTSTARTDISC : Start BT discovery

AT+BTSPPINIT : Classic Bluetooth SPP profile initialization

AT+BTSPPCONN : Establishes SPP connection

AT+BTSPDISCONN : Ends SPP connection

AT+BTSPSTART : Start Classic Bluetooth SPP profile

AT+BTSPSEND : Sends data to remote bt spp device

AT+BTA2DPINIT : Classic Bluetooth A2DP profile initialization

AT+BTA2DPCONN : Establishes A2DP connection

AT+BTA2DPDISCONN : Ends A2DP connection

AT+BTA2DPSRC : Set or query the audio file URL

AT+BTA2DPCTRL : control the audio play

AT+BTSECPARAM :Set and query the Classic Bluetooth security parameters

AT+BTKEYREPLY :Input the Simple Pair Key

AT+BTPINREPLY :Input the Legacy Pair PIN Code

AT+BTSECCFM: Reply the confirm value to the peer device in the legacy connection stage

AT+BTENCDEV : Query BT encryption device list

AT+BTENCCLEAR : Clear BT encryption device list

MQTT command

AT+MQTTUSERCFG : Set MQTT User Config

AT+MQTTCONNCFG : Set configuration of MQTT Connection

AT+MQTTCONN : Connect to MQTT Broker

AT+MQTTPUB : Publish MQTT Data in string

AT+MQTTPUBRAW : Publish MQTT message in binary

AT+MQTTSUB : Subscribe to MQTT Topic

AT+MQTTUNSUB : Unsubscribe from MQTT Topic

AT+MQTTCLEAN : Close the MQTT Connection

HTTP command

AT+HTTPCLIENT - Send HTTP Client Request

(2) 问题修复: fix: It may crash if AT command ends without '\r\n'

fix: Sometimes it may fail to quit from UART-WiFi passthrough mode

fix: AT+CIPSTART does not work if just enable ethernet;

变更描述/Description of Change:固件更新迭代


变更前图片/Before change picture 变更后图片/After change picture

<pre>接收 + [0:32mI (103) boot: End of partition table+[0m + [0:32mI (107) boot: No factory image, trying OTA 0+[0m + [0:32mI (112) esp_image: segment 0: paddr=0x00100020 vaddr=0x3f400020 size=0x1e624 (124452) map+[0m + [0:32mI (165) esp_image: segment 1: paddr=0x0011e64c vaddr=0x3ffc0000 size=0x019c4 (6596) load+[0m + [0:32mI (188) esp_image: segment 2: paddr=0x00120018 vaddr=0x400d0018 size=0xe8a48 (965192) map+[0m + [0:32mI (509) esp_image: segment 3: paddr=0x0020ba68 vaddr=0x3ffc19c4 size=0x01c28 (7208) load+[0m + [0:32mI (512) esp_image: segment 4: paddr=0x0020d698 vaddr=0x3ffc35ec size=0x00000 (0) load+[0m + [0:32mI (516) esp_image: segment 5: paddr=0x0020d6a0 vaddr=0x40080000 size=0x00400 (1024) load+[0m + [0:32mI (525) esp_image: segment 6: paddr=0x0020daa8 vaddr=0x40080400 size=0x163ec (91116) load+[0m + [0:32mI (572) esp_image: segment 7: paddr=0x00223e9c vaddr=0x400c0000 size=0x00064 (100) load+[0m + [0:32mI (572) esp_image: segment 8: paddr=0x00223f08 vaddr=0x50000000 size=0x00000 (0) load+[0m + [0:32mI (592) boot: Loaded app from partition at offset 0x100000+[0m + [0:32mI (592) boot: Disabling RNG early entropy source...+ [0m Ai_Thinker_AT_V1.0</pre>	<pre>Load:0x3fff001c,len:6916 Load:0x40078000,len:14368 Load:0x40080400,len:4248 entry 0x400806e0 [0:32mI (71) boot: Chip Revision: 1[0m [0:32mI (71) boot_comm: chip revision: 1, min. bootloader chip revision: 0[0m [0:32mI (38) boot: ECF-IPF v4.0:baa22d14-g99f8e3f7 End stage bootloader[0m [0:32mI (39) boot: compile time 07:55:04[0m [0:32mI (39) boot: Enabling RNG early entropy source... [0m [0:32mI (45) boot: SPI Speed : 40MHz[0m [0:32mI (49) boot: SPI Mode : DIO[0m [0:32mI (53) boot: SPI Flash Size : 4MB[0m [0:32mI (57) boot: Partition Table: [0m [0:32mI (61) boot: ## Label Usage Type ST Offset Length[0m [0:32mI (68) boot: 0 phy_init RF data 01 01 0000f000 00001000[0m [0:32mI (75) boot: 1 otadata OTA data 01 00 00010000 00002000[0m [0:32mI (83) boot: 2 nvs WiFi data 01 02 00012000 0000e000[0m [0:32mI (90) boot: 3 at_customize unknown 40 00 00020000 000e0000[0m [0:32mI (98) boot: 4 ota_0 OTA app 00 10 00100000 00180000[0m [0:32mI (105) boot: 5 ota_1 OTA app 00 11 00280000 00180000[0m [0:32mI (113) boot: End of partition table[0m [0:32mI (117) boot_comm: chip revision: 1, min. application chip revision: 0[0m [0:32mI (124) esp_image: segment 0: paddr=0x00100020 vaddr=0x3f400020 size=0x28178 (164216) map[0m [11:25:35.798]收+ [0:32mI (191) esp_image: segment 1: paddr=0x001281a0 vaddr=0x3ffbdb60 size=0x032ec (13036) [0:32mI (197) esp_image: segment 2: paddr=0x0012b494 vaddr=0x40080000 size=0x00400 (1024) load[0m [0:32mI (199) esp_image: segment 3: paddr=0x0012b89c vaddr=0x40080400 size=0x04774 (18292) load[0m [0:32mI (215) esp_image: segment 4: paddr=0x00130018 vaddr=0x400d0018 size=0x102acc (1059532) map[0m [11:25:36.199]收+ [0:32mI (592) esp_image: segment 5: paddr=0x00232aec vaddr=0x40084b74 size=0x134c0 (79040) [11:25:36.232]收+ [0:32mI (625) esp_image: segment 6: paddr=0x00245fb4 vaddr=0x400c0000 size=0x00064 (100) [0:32mI (640) boot: Loaded app from partition at offset 0x100000[0m [0:32mI (640) boot: Disabling RNG early entropy source... [0m [11:25:36.415]收+ 2.0.0 max tx power=78,ret=0</pre> <p style="text-align: right; color: red;">2.0.0和07:55:04固件启动成功</p>
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变更影响/Impact of Change:
新增 AT 指令与修复固件 BUG

变更识别方式/ Change Identification Method:
变更前: 固件启动信息
Before change:
变更后: 固件启动信息
After change:

变更前后产品处理/:How to Deal with Products:
先进先出/FIFO

变更人/Change Owner:	王汉生	签名: 	日期:2020-03-14 Date:
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Ai-thinker 批准人/Approved By
如果无需相关人员批准,请在相应栏位上填写“N/A”
Input “N/A” in column(s) where approval is not required

产品技术中心: Product Technology Center:	徐付强	签名: 	日期:2020-03-14 Date:
交付中心: Delivery Center:	李伟	签名: N/A Signature:	日期: N/A Date:
销售: Sales:	秦桂华	签名: 	日期:2020-03-14 Date:

备注: 以上信息由 Ai-thinker 填写
Note: The information above shall be filled in by Ai-thinker



客户响应要求

Customer Response Requirements

客户须按照如下要求给 Ai-thinker PCN 反馈

Customers are required to respond to Ai-thinker, according to the following guidelines, and confirm receipt of the PCN:

主要变更/For Major Changes

a) 客户必须在安信可发出 PCN 后 7 天内告知已收到 PCN。

Customers should confirm receipt of the PCN within 7 calendar days from the date Ai-thinker sends it to them.

b) 如客户为在接收到 PCN 后 7 天内告知已收到，则视为客户接受变更。

If customers do not confirm receipt of the PCN within 7 calendar days, they will be regarded as having accepted the proposed changes.

c) 客户告知确认收到 PCN 后，如未在 7 天反馈其他要求，则视为客户接受变更。

After the customers confirm receipt of the PCN, the lack of any additional responses on their part within 7 calendar days constitutes acceptance of the proposed changes.

轻微变更/For Minor Changes

a) 如客户未在接收到 PCN 后 3 天告知已收到，则视为客户接受变更。

a) If customers do not confirm receipt of the PCN within 3 calendar days, they will be regarded as having accepted the proposed changes.

请反馈至 support@aithinker.com

Please send feedback to support@aithinker.com.

客户批准/确认信息

Customer Approval/Acknowledgement and Remarks

客户公司全称:

Customer' s Company Name:

PCN 评审结果//PCN Review Result: 批准/Approval

不批准/Disapproval

需要分析/Further Analysis Required

客户意见/Comment:

公司代表姓名:

Representative' s Name:

公司代表人职责:

Representative' s Job Title:

公司代表人签名:

Representative' s Signature:

日期:

Date: