文件编号 Document No.	ESP-00-2-007-03	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	1.1	保存期限 Retention Period	3 年 3 years

ESP32 系列模组 AT 升级 **Upgrading AT Firmware for ESP32 Modules**			
PCN 编号 PCN No.	PCN-03-2019011001	提出日期 Issue Date of PCN	2019-1-10
产品名称 Product Name	ESP32-WROOM-32 ESP32-WROOM-32D ESP32-WROOM-32U ESP32-WROOM-32DC ESP32-WROOM-32UC ESP32-WROOM-32SE ESP32-SOLO-1 ESP32-SOLO-1C	变更日期 Proposed Date of Change	2019-1-10
封装类型/尺寸 Package Type/Size	Module	首次出货日期 Proposed Date of First Shipment	2019-4-10
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:

1. ESP32 IDF 升级，同时 AT 应用固件同步升级；To match the AT firmware to the upgraded ESP32 SDK;
2. 针对上一般版本 Bug 进行修复。To fix existing bugs in the previous version.

变更描述/Description of Change:

模组默认烧写的通用版本 AT 固件更新。Upgrading the default AT firmware downloaded to all ESP32 modules.

Features

1. Modified the AT firmware to match it to the latest ESP-IDF SDK (v3.0.7).
2. Added support for the factory parameter partition, so the AT firmware can be used by different ESP32 modules directly, eliminating the requirement of recompilation.

Bug Fixes

1. Fixed the bug that occasionally led to an unexpected system crash when the TCP server was being shut down.
2. Fixed an issue where an ESP device would unexpectedly reboot whilst working in SoftAP mode in some specific environment settings.

变更影响/Impact of Change:
1. 修复当前版本中的部分问题；Fixed the existing issues in the previous version;
2. 优化版本稳定性；Improved stability, compared with the previous version;
3. 同时兼容旧版本。Maintained compatibility with the older versions of the AT firmware.

变更识别方式/ Change Identification Method:
• 变更前 AT 版本 AT firmware version before the change: V1.1.1.0
• 变更后 AT 版本 AT firmware version after the change: V1.1.3.0

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

相关报告/Report(s) Attached:

☒Related ECN No.:	E2019010901/E2019010902
☐Reliability Report or Plan:	
☐Function Test Report:	
☐RoHS/HF Test Report:	
☐Other Reports (Pls specify):	

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邮件订阅

Espressif Email Notifications

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乐鑫为注册用户提供电子邮件通知服务，用户可通过乐鑫订阅系统接收技术文档更新、新闻通讯、PCN 等邮件通知。

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客户响应要求

Customer Response Requirements

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客户须按照如下要求给予 Espressif PCN 反馈：

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

主要变更/For Major Changes：

a) 客户须在乐鑫发出 PCN 后的 30 天内告知已收到 PCN。

Customers should confirm receipt of the PCN within 30 calendar days from the date Espressif sends it to them.

b) 如客户未在接收到 PCN 后的 30 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 30 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 90 天内反馈其他要求，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 90 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 后的 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.

请反馈至 pcn@espressif.com。

Please send feedback to pcn@espressif.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:			
公司代表人姓名 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:	