

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-WROVER-B 技术规格书修改**  
**ESP32-WROVER-B Datasheet Amendments**

PCN 编号 PCN No.	PCN-2020-001	提出日期 Issue Date of PCN	2020/3/16
产品名称 Product Name	ESP32-WROVER-B	变更日期 Proposed Date of Change	2020/3/23
封装类型/尺寸 Package Type/Size	NA	首次出货日期 Proposed Date of First Shipment	2020/4/1

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:  
由于模组搭载的 PSRAM 的性能经过优化并验证, 模组的最高工作温度可以支持 85 °C (原为 65 °C)。  
The performance of the latest batch of PSRAM is validated on the module operating at 85 °C . The operating temperate of the module is raised from 65 °C to 85 °C.

变更描述/Description of Change


- 修改 ESP32-WROVER-B 的技术规格书, 将建议工作温度范围从 -40 °C ~ 65 °C 修改为 -40 °C ~ 85 °C。  
The datasheet of ESP32-WROVER-B is modified, changing the recommended operating temperature range from -40 °C ~ 65 °C to -40 °C ~ 85 °C.
- 修改 ESP32-WROVER-B 的 MPN, 具体请见如下表格。  
The MPNs of ESP32-WROVER-B are changed, please refer to the following table for reference.

Module	Variants	MPN before change	MPN after change
ESP32-WROVER-B(PCB Antenna)	4 MB flash	ESP32-WROVER-B(M21 3DH3264PC3Q0)	ESP32-WROVER-B(M21 3DH3264PH3Q0)
ESP32-WROVER-B(PCB Antenna)	8 MB flash	ESP32-WROVER-B(M21 3DH6464PC3Q0)	ESP32-WROVER-B(M21 3DH6464PH3Q0)
ESP32-WROVER-B(PCB Antenna)	16 MB flash	ESP32-WROVER-B(M21 3DH2864PC3Q0)	ESP32-WROVER-B(M21 3DH2864PH3Q0)
ESP32-WROVER-B(IPEX Antenna)	4 MB flash	ESP32-WROVER-B(M21 3DH3264UC3Q0)	ESP32-WROVER-B(M21 3DH3264UH3Q0)
ESP32-WROVER-B(IPEX Antenna)	8 MB flash	ESP32-WROVER-B(M21 3DH6464UC3Q0)	ESP32-WROVER-B(M21 3DH6464UH3Q0)

ESP32-WROVER-B(IPEX Antenna)	16 MB flash	ESP32-WROVER-B(M21 3DH2864UC3Q0)	ESP32-WROVER-B(M21 3DH2864UH3Q0)
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3. 修改了 ESP32-WROVER-B 的屏蔽盖外观，具体请见如下表格。

The shield markings of ESP32-WROVER-B are changed, please refer to the following table for reference.

Marking	The characters of the last line (Marked in red on the left)	
		Before change
After change		XX0HXX

**影响产品/Impacted Products:**

ESP32-WROVER-B (PCB Antenna)

ESP32-WROVER-B (IPEX Antenna)

**变更前/Before Change:**

1. 技术规格书中的表 2 中的建议工作温度范围为  $-40^{\circ}\text{C} \sim 65^{\circ}\text{C}$

The recommended operating temperature range in datasheet Table 2 is  $-40^{\circ}\text{C} \sim 65^{\circ}\text{C}$

2. 技术规格书中的表 6 中的工作温度最大值为  $65^{\circ}\text{C}$

The max operating temperature in datasheet Table 6 is  $65^{\circ}\text{C}$

3. 变更前的 MPN 请见“变更描述”

Please refer to 'Description of Change' for the MPN before change

4. 屏蔽盖最后一行的第四个字母为“C”

The forth character of the last line of the shield is 'C'

**变更后/After Change:**

1. 技术规格书中的表 2 中的建议工作温度范围为  $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$

The recommended operating temperature range in datasheet Table 2 is  $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$

2. 技术规格书中的表 6 中的工作温度最大值为  $85^{\circ}\text{C}$

The max operating temperature in datasheet Table 6 is  $85^{\circ}\text{C}$

3. 变更后的 MPN 请见“变更描述”

Please refer to 'Description of Change' for the MPN after change

4. 屏蔽盖最后一行的第四个字母为“H”

The forth character of the last line of the shield is 'H'

变更影响/Impact on Quality, Cost, Delivery, Performance:

1. ESP32-WROVER-B 的性能提升：最大工作温度从 65 °C 提高到 85 °C。  
The performance of ESP32-WROVER-B is improved: The maximum operating temperature is raised from 65 °C to 85 °C.
2. 变更前后的模组的 MPN 不同，客户可能需要修改订单。  
The MPNs before or after change are different, the customers may need to update the orders

变更识别方式/ Change Identification Method:

1. 可以通过 MPN 区分变更前后出货的模组，具体请见“变更描述”。  
The modules shipped before or after this change can be distinguished by the MPN, please refer to 'Description of Change' for details.
2. 可以通过屏蔽盖的外观识别变更前后出货的模组，具体请见“变更描述”。  
The modules shipped before or after change can be distinguished by the shield markings. Please refer to 'Description of Change' for details.

变更前后产品处理:/How to Deal with Products:

1. ESP32-WROVER-B 模组将遵循先进先出的方式。  
ESP32-WROVER-B will follow the rule of first in and first out.
2. 若客户因 MPN 变动而需要更改订单，请联系乐鑫的商务/销售团队。  
Customers who wish to update orders because of the MPN change can contact Espressif Business/Sales team for assistance.

相关报告/Report(s) Attached:

- Related ECN No.: ECN-2020-005
- Reliability Report or Plan: \_\_\_\_\_
- Qualification Report or Plan: \_\_\_\_\_
- RoHS/HF Test Report: \_\_\_\_\_
- Function Test Report: \_\_\_\_\_
- Other Reports (Pls specify): [#20598\\_PSRAM\\_LY68L6400SLIT\\_QVL\\_test\\_report](#)

**邮件订阅**

**Espressif Email Notifications**

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。

Espressif sends email notifications of technical documentation changes, along with newsletters, PCNs and other valuable information, to subscribed customers only. If you wish to stay updated on our products and

services, please subscribe [here](#).

### 客户响应要求

#### Customer Response Requirements

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](mailto:pcn@espressif.com)。

Please send feedback to [pcn@espressif.com](mailto: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:

批准/Approval

PCN 评审结果/PCN Review Result:  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:	