

文件编号 Document No.	ESP-07-2-007-03	文件名称 Document Name	产品/工艺变更通知 Product/Process Change Notice (PCN)
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升级乐鑫部分通用模组的产品料号及模组丝印 Upgrade Manufacturer Part Number and Laser Marking of Espressif Module			
PCN 编号 PCN No.	PCN-2021-030	提出日期 Issue Date of PCN	2021/12/16
变更日期 Proposed Date of Change	2022/01/10	首次出货日期 Proposed Date of First Shipment	2022/01/25
PCN 类型 / PCN Category	<input type="checkbox"/> 客户需要批准/ Customer Approval Required <input checked="" type="checkbox"/> 客户通知/ Customer Notification		
1. 影响产品名称/ Affected Product Name 1) ESP8089M16 2) ESP8266 系列模组/ ESP8266 Series Modules: ESP-WROOM-02, ESP-WROOM-S2, ESP-WROOM-02D, ESP-WROOM-02U, ESP-WROOM-02DC, ESP-WROOM-02UC, ESP-WROOM-5V2L, ESP-WROOM-5C 3) ESP32 系列模组/ ESP32 Series Modules: ESP32-WROOM-32, ESP32-WROVER, ESP32-WROOM-32D, ESP32-WROOM-32U, ESP32-SOLO-1, ESP32-WROVER-B, ESP32-WROOM-32DC, ESP32-WROOM-32UC, ESP32-SOLO-1C, ESP32-WROOM-32SE, ESP32-WROVER-E, ESP32-WROVER-IE, ESP32-WROOM-32E, ESP32-WROOM-32UE, ESP32-DU1906, ESP32-DU1906-U 4) ESP32-S2 系列模组/ ESP32-S2 Series Modules: ESP32-S2-WROOM, ESP32-S2-WROOM-I, ESP32-S2-WROVER, ESP32-S2-WROVER-I			
2. 变更原因/ Reason for Change 为方便客户更加快速准确地识别模组产品规格，乐鑫将优化部分模组的产品料号（MPN）及外观丝印。 To facilitate the identification of Espressif module names and their specifications with improved efficiency and accuracy, Espressif will rename some modules with new Manufacturer Part Number (MPN) and update laser marking as well.			
3. 变更描述/ Description of Change 按照乐鑫更新后的料号规则，对部分模组的产品料号进行升级，模组屏蔽盖的丝印标识同步更新。模组产品料号规则可以参考以下： Espressif will update MPN of some Espressif module products to a new naming convention and part of the marking on module's shield cover is updated at the same time. See details below for new naming convention.			

MPN 示例 MPN example	ESP32-S3-WROOM-1-N 8 R2 <u>ESP32-S3-WROOM-1-N 8 R2</u> (1) (2) (3) (4)
组成部分 Parts description	说明 Clarification
(1). 模组名称 (1). Product name	乐鑫模组名称 Espressif module name
(2). 模组的温度规格 (1 位) (2). Temperature spec(1 digit)	N: -40℃ ~ +65℃ or -40℃ ~ +85℃ (<i>please refer to module datasheet</i>) H: -40℃ ~ +105℃ S: -40℃ ~ +125℃
(3). Flash 容量 (单位: MB) (3). Flash size(unit: MB)	2 MB, 4 MB, 8 MB, 16 MB, etc.
(4). PSRAM 容量 (单位: MB) (4). PSRAM size(unit: MB)	1. "R+ PSRAM size", 如 R2, R8 等 1. Starting with 'R', followed by 2,4,8,etc., indicating PSRAM size 2. 若模组不搭载 PSRAM, 默认无此字段 2. Unavailable if not specified

具体变更内容可以参考附录 I: 变更对比。

For details, please refer to Appendix I: Change Comparison.

4. 变更对比/ Change Comparison

请见附录 I: 变更对比。

Please refer to Appendix I: Change Comparison.

识别方式/Identification Method:

您可通过产品标签中的产品料号或者模组屏蔽盖的丝印进行识别。

Identify by the product label or laser marking on the affected module products.

5. 变更影响/ Impact of Change

1) 品质和性能/ Quality & Performance: 无影响/ No impact

2) 交期/ Delivery: 无影响/ No impact

3) 生产料号/ Manufacturer Part Number (MPN):

如客户采购段落 1 中的模组产品, 请使用新的产品料号下单。

If customer purchases the module products listed in para 1, please place an order with the new MPN.

4) 认证/ Certification: 无影响/ No impact

6. 变更前后产品处理/ How to Deal with Products

FIFO

7. 相关报告/ Report(s) Attached:

Related ECN No. ECN-2021-041

Appendix I 变更对比/ Change Comparison

1. 产品料号信息/ MPN Information

产品名称 Product Name	变更前产品物料号 MPN Before Change	变更后产品物料号 MPN After Change
ESP8089M16	ESP8089M16(M3089N0000NH3Q0)	ESP8089M16
ESP-WROOM-02	ESP-WROOM-02(M1002H1600PH3Q0)	ESP-WROOM-02-N2
	ESP-WROOM-02(M1002H3200PH3Q0)	ESP-WROOM-02-N4
ESP-WROOM-S2	ESP-WROOM-S2(M1002H1600PH3Q0)	ESP-WROOM-S2-N2
ESP-WROOM-02D	ESP-WROOM-02D(M1102H1600PH3Q0)	ESP-WROOM-02D-N2
	ESP-WROOM-02D(M1102H3200PH3Q0)	ESP-WROOM-02D-N4
	ESP-WROOM-02D(M1102H1600PS3Q0)	ESP-WROOM-02D-H2
	ESP-WROOM-02D(M1102H6400PH3Q0)	ESP-WROOM-02D-N8
	ESP-WROOM-02D(M1102H2800PH3Q0)	ESP-WROOM-02D-N16
ESP-WROOM-02U	ESP-WROOM-02U(M1102H1600UH3Q0)	ESP-WROOM-02U-N2
	ESP-WROOM-02U(M1102H3200UH3Q0)	ESP-WROOM-02U-N4
	ESP-WROOM-02U(M1102H1600US3Q0)	ESP-WROOM-02U-H2
	ESP-WROOM-02U(M1102H2800UH3Q0)	ESP-WROOM-02U-N16
ESP-WROOM-02DC	ESP-WROOM-02DC(M1102H1600PH3D0)	ESP-WROOM-02DC-N2
ESP-WROOM-02UC	ESP-WROOM-02UC(M1102H1600UH3D0)	ESP-WROOM-02UC-N2
ESP-WROOM-5V2L	ESP-WROOM-5V2L(M1102S1600PH3D0)	ESP-WROOM-5V2L-N2
ESP-WROOM-5C	ESP-WROOM-5C(M1185H0000PH3D0)	ESP-WROOM-5C-N2
	ESP-WROOM-5C(M1185H0000PS3D0)	ESP-WROOM-5C-H2
ESP32-WROOM-32	ESP32-WROOM-32(M103QH3200PH3Q0)	ESP32-WROOM-32-N4
	ESP32-WROOM-32(M103QH6400PH3Q0)	ESP32-WROOM-32-N8
	ESP32-WROOM-32(M103QH2800PH3Q0)	ESP32-WROOM-32-N16
ESP32-WROVER	ESP32-WROVER(M203QL3264PH3Q0)	ESP32-WROVER-N4R8
	ESP32-WROVER-I(M203QL3264UH3Q0)	ESP32-WROVER-I-N4R8
	ESP32-WROVER(M203QL6464PH3Q0)	ESP32-WROVER-N8R8
	ESP32-WROVER(M203QL2864PH3Q0)	ESP32-WROVER-N16R8
	ESP32-WROVER-I(M203QL6464UH3Q0)	ESP32-WROVER-I-N8R8
	ESP32-WROVER-I(M203QL2864UH3Q0)	ESP32-WROVER-I-N16R8
ESP32-WROOM-32D	ESP32-WROOM-32D(M113DH3200PH3Q0)	ESP32-WROOM-32D-N4
	ESP32-WROOM-32D(M113DH6400PH3Q0)	ESP32-WROOM-32D-N8
	ESP32-WROOM-32D(M113DH2800PH3Q0)	ESP32-WROOM-32D-N16
	ESP32-WROOM-32D(M113DH3200PS3Q0)	ESP32-WROOM-32D-H4







产品名称 Product Name	变更前产品物料号 MPN Before Change	变更后产品物料号 MPN After Change
ESP32-WROOM-32U	ESP32-WROOM-32U(M113DH3200UH3Q0)	ESP32-WROOM-32U-N4
	ESP32-WROOM-32U(M113DH6400UH3Q0)	ESP32-WROOM-32U-N8
	ESP32-WROOM-32U(M113DH2800UH3Q0)	ESP32-WROOM-32U-N16
	ESP32-WROOM-32U(M113DH3200US3Q0)	ESP32-WROOM-32U-H4
ESP32-SOLO-1	ESP32-SOLO-1(M113SH3200PH3Q0)	ESP32-SOLO-1-N4
	ESP32-SOLO-1(M113SH3200PS3Q0)	ESP32-SOLO-1-H4
ESP32-WROVER-B	ESP32-WROVER-B(M213DH3264PH3Q0)	ESP32-WROVER-B-N4R8
	ESP32-WROVER-B(M213DH6464PH3Q0)	ESP32-WROVER-B-N8R8
	ESP32-WROVER-B(M213DH2864PH3Q0)	ESP32-WROVER-B-N16R8
	ESP32-WROVER-IB(M213DH3264UH3Q0)	ESP32-WROVER-IB-N4R8
	ESP32-WROVER-IB(M213DH6464UH3Q0)	ESP32-WROVER-IB-N8R8
	ESP32-WROVER-IB(M213DH2864UH3Q0)	ESP32-WROVER-IB-N16R8
ESP32-WROOM-32DC	ESP32-WROOM-32DC(M113DH3200PH3D0)	ESP32-WROOM-32DC-N4
ESP32-WROOM-32UC	ESP32-WROOM-32UC(M113DH3200UH3D0)	ESP32-WROOM-32UC-N4
ESP32-SOLO-1C	ESP32-SOLO-1C(M113SH3200PH3D0)	ESP32-SOLO-1C-N4
ESP32-WROOM-32SE	ESP32-WROOM-32SE(M123DH3200PH3Q0)	ESP32-WROOM-32SE-N4
	ESP32-WROOM-32SE(M123DH3200PH3QC)	ESP32-WROOM-32SE-N4
	ESP32-WROOM-32SE(M123DH6400PH3QC)	ESP32-WROOM-32SE-N8
	ESP32-WROOM-32SE(M123DH2800PH3QC)	ESP32-WROOM-32SE-N16
ESP32-WROVER-E	ESP32-WROVER-E(M213EH3264PH3Q0)	ESP32-WROVER-E-N4R8
	ESP32-WROVER-E(M213EH6416PH3Q0)	ESP32-WROVER-E-N8R2
	ESP32-WROVER-E(M213EH6464PH3Q0)	ESP32-WROVER-E-N8R8
	ESP32-WROVER-E(M213EH2864PH3Q0)	ESP32-WROVER-E-N16R8
ESP32-WROVER-IE	ESP32-WROVER-IE(M213EH3264UH3Q0)	ESP32-WROVER-IE-N4R8
	ESP32-WROVER-IE(M213EH6464UH3Q0)	ESP32-WROVER-IE-N8R8
	ESP32-WROVER-IE(M213EH2864UH3Q0)	ESP32-WROVER-IE-N16R8
ESP32-WROOM-32E	ESP32-WROOM-32E(M113EH3200PH3Q0)	ESP32-WROOM-32E-N4
	ESP32-WROOM-32E(M113EH6400PH3Q0)	ESP32-WROOM-32E-N8
	ESP32-WROOM-32E(M113EH2800PH3Q0)	ESP32-WROOM-32E-N16
	ESP32-WROOM-32E(M113EH3200PS3Q0)	ESP32-WROOM-32E-H4
	ESP32-WROOM-32E(M113EH6400PS3Q0)	ESP32-WROOM-32E-H8
ESP32-WROOM-32UE	ESP32-WROOM-32UE(M113EH3200UH3Q0)	ESP32-WROOM-32UE-N4
	ESP32-WROOM-32UE(M113EH6400UH3Q0)	ESP32-WROOM-32UE-N8
	ESP32-WROOM-32UE(M113EH2800UH3Q0)	ESP32-WROOM-32UE-N16
	ESP32-WROOM-32UE(M113EH3200US3Q0)	ESP32-WROOM-32UE-H4

产品名称 Product Name	变更前产品物料号 MPN Before Change	变更后产品物料号 MPN After Change
	ESP32-WROOM-32UE(M113EH6400US3Q0)	ESP32-WROOM-32UE-H8
ESP32-DU1906	ESP32-DU1906(M403EH6464PH3Q0)	ESP32-DU1906-N8R8
	ESP32-DU1906(M403EH2864PH3Q0)	ESP32-DU1906-N16R8
ESP32-DU1906-U	ESP32-DU1906-U(M403EH6464UH3Q0)	ESP32-DU1906-U-N8R8
	ESP32-DU1906-U(M403EH2864UH3Q0)	ESP32-DU1906-U-N16R8
ESP32-S2-WROOM	ESP32-S2-WROOM(M22S2H3200PH3Q0)	ESP32-S2-WROOM-N4
	ESP32-S2-WROOM(M22S2H3200PS3Q0)	ESP32-S2-WROOM-H4
	ESP32-S2-WROOM(M22S2H6400PH3Q0)	ESP32-S2-WROOM-N8
	ESP32-S2-WROOM(M22S2H2800PH3Q0)	ESP32-S2-WROOM-N16
ESP32-S2-WROOM-I	ESP32-S2-WROOM-I(M22S2H3200UH3Q0)	ESP32-S2-WROOM-I-N4
	ESP32-S2-WROOM-I(M22S2H3200US3Q0)	ESP32-S2-WROOM-I-H4
	ESP32-S2-WROOM-I(M22S2H6400UH3Q0)	ESP32-S2-WROOM-I-N8
	ESP32-S2-WROOM-I(M22S2H2800UH3Q0)	ESP32-S2-WROOM-I-N16
ESP32-S2-WROVER	ESP32-S2-WROVER(M22S2H3216PH3Q0)	ESP32-S2-WROVER-N4R2
	ESP32-S2-WROVER(M22S2H3264PH3Q0)	ESP32-S2-WROVER-N4R8
	ESP32-S2-WROVER(M22S2H6416PH3Q0)	ESP32-S2-WROVER-N8R2
	ESP32-S2-WROVER(M22S2H2816PH3Q0)	ESP32-S2-WROVER-N16R2
ESP32-S2-WROVER-I	ESP32-S2-WROVER-I(M22S2H3216UH3Q0)	ESP32-S2-WROVER-I-N4R2
	ESP32-S2-WROVER-I(M22S2H6416UH3Q0)	ESP32-S2-WROVER-I-N8R2
	ESP32-S2-WROVER-I(M22S2H2816UH3Q0)	ESP32-S2-WROVER-I-N16R2

2. 产品标签信息/ Product Label Information

项目 Item	变更前 Before Change	变更后 After Change
产品标签 Product Label	<div style="border: 1px solid black; padding: 10px;">  <p style="text-align: center;">乐鑫信息科技（上海）股份有限公司</p> <hr/> <p>生产工单 PW Number PW-2020-11-0001</p> <hr/> <p>产品型号 Product Name ESP32-WROOM-32D</p> <hr/> <p>产品料号 Part Number M113DH3200PH3Q0</p> <hr/> <p>数量 Quantity 650 pcs</p> <hr/> <p>固件版本 Firmware Ver IDF: AT: FW P/N:</p> <hr/> <p>原产国 Country of CHINA</p> <hr/> <p>生产日期 Seal Date 2020-12-06</p> <hr/> <p>批次号 Lot Number 202048-000001</p> <hr/> <p>出货检验 OQC 产品条码 QR code</p> <div style="display: flex; justify-content: space-around;">   </div> </div>	<div style="border: 1px solid black; padding: 10px;">  <p style="text-align: center;">乐鑫信息科技（上海）股份有限公司</p> <hr/> <p>生产工单 PW Number PW-2020-11-0001</p> <hr/> <p>产品型号 Product Name ESP32-WROOM-32D</p> <hr/> <p>产品料号 Part Number ESP32-WROOM-32D-N4</p> <hr/> <p>数量 Quantity 650 pcs</p> <hr/> <p>固件版本 Firmware Ver IDF: AT: FW P/N:</p> <hr/> <p>原产国 Country of CHINA</p> <hr/> <p>生产日期 Seal Date 2020-12-06</p> <hr/> <p>批次号 Lot Number 202048-000001</p> <hr/> <p>出货检验 OQC 产品条码 QR code</p> <div style="display: flex; justify-content: space-around;">   </div> </div>
备注 Note	产品标签上的产品料号即为 MPN 信息。 MPN shows as Product Number on Product Label.	

3. 模组屏蔽盖丝印信息/ Laser Marking on Module's Shield Cover

项目 Item	变更前 Before Change	变更后 After Change
产品丝印 Product Laser Marking	<div style="border: 1px dashed black; padding: 10px; text-align: center;">  ESPRESSIF Module Product Name  FCC ID : IC ID : CMIIT ID: 乐鑫信息科技 (上海) 股份有限公司 <div style="border: 1px solid red; display: inline-block; padding: 2px;">XX0H32</div>  </div> <p style="margin-left: 20px;"> flash on module 16 = 2 MB 32 = 4 MB 64 = 8 MB 28 = 16 MB Operating temperature 0C = -40°C ~ +65°C 0H = -40°C ~ +85°C 0S = -40°C ~ +105°C </p>	<div style="border: 1px dashed black; padding: 10px; text-align: center;">  ESPRESSIF Module Product Name  FCC ID : IC ID : CMIIT ID: 乐鑫信息科技 (上海) 股份有限公司 <div style="border: 1px solid red; display: inline-block; padding: 2px;">XXN4R2</div>  </div> <p style="margin-left: 20px;"> PSRAM on module (optional) R2 = 2 MB R4 = 4 MB R8 = 8 MB flash on module 2 = 2 MB 4 = 4 MB 8 = 8 MB 16 = 16 MB 32 = 32 MB Operating temperature N = -40°C ~ +65°C or -40°C ~ +85°C (please refer to module datasheet) H = -40°C ~ +105°C </p>

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
需客户批准的变更/ Change Requiring Customer Approval:

a) 客户须在乐鑫发出 PCN 后的 30 天内告知乐鑫已收到 PCN。如客户未在接收到 PCN 后的 30 天内告知已收到，则视为客户收到变更。

Customers are requested to acknowledge receipt of the PCN within 30 calendar days from the date of issue of the PCN. Customers would be considered as notified 30 calendar days after issue of the PCN if no acknowledgement is received.

b) 自发布 PCN 之日起 90 天内，客户没有任何其他反馈，则表示客户接受该 PCN。

The lack of any additional responses from customers within 90 calendar days from date of issue of the PCN constitutes acceptance of the proposed changes.

客户通知/ Customer Notification:

a) 客户需在乐鑫发出 PCN 后 14 天内通知乐鑫收到该 PCN。如客户未在接收到 PCN 14 日反馈乐鑫，则视为客户确认该 PCN。

Customers are requested to acknowledge receipt of the PCN within 14 calendar days from the date of issue of the PCN. Customers would be considered as having acknowledged the PCN if no response is received after 14 calendar days.

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/确认 Accepted/Acknowledged

不批准/ Rejected

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: