

## Rockchip Application Notice

## RK3588S&amp;RK3588S2

## OVERVIEW

ISSUE DATE:	Nov.-7-2023
AN NO:	RKAN18058
PRODUCT AFFECTED:	RK3588S & RK3588S2
SUBJECT:	RK3588S & RK3588S2 功能差异与切换建议
SUMMARY:	建议客户使用RK3588S2替换RK3588S。
REMARK:	若有疑问请联系对应的瑞芯微业务人员。

## DESCRIPTION

## 差异说明如下:

为了增加摄像头的接入数量，RK3588S2 型号在原有封装上做了功能调整，软硬件上可实现与旧封装 RK3588S 的兼容设计，引脚功能差异说明如下：

Package PIN	RK3588S Function		RK3588S2 Function		修改说明
BB41/BA41/ BA38/BB38/ BA40/AY40/ AY42/BA42/ AW41/AW42	MIPI D/C-PHY CSI_RX PORT0	1*4lane	MIPI DPHY CSI_RX PORT0	1*4lane or 2*2lane	将 DCPHY 接口更换为 DPHY 接口; 将 RK3588S 封装的两个 GND 球位改为 CLK, 支 持 2*2lane
AN37/AN38	GND				
BA26/BB26/ BA23/BB23/ BB25/BA25/ BA28/BA29/ BB29	MIPI D/C-PHY CSI_RX PORT1	1*4lane	MIPI D/C-PHY CSI_RX PORT1	1*4lane	功能保持不变
AN42/AN41/ AL42/AL41/ AK41/AK42/ AU41/AU42/ AT41/AT42/ AP42/AP41	MIPI DPHY CSI_RX PORT0	1*4lane or 2*2lane	MIPI DPHY CSI_RX PORT1	1*4lane or 2*2lane	接口由 Port0 更换为 Port1

如表所示, RK3588S2 较 RK3588S 少了一组 MIPI D/C-PHY CSI\_RX PORT0, 新增一组 MIPI DPHY CSI\_RX PORT1, 同时接口位置除 MIPI D/C-PHY CSI\_RX PORT1 不变外, 其余接口位置有整体移动, 并且 RK3588S2 的 MIPI DPHY CSI\_RX PORT0 接口在 PIN AN37/AN38 新增一组时钟 MIPI\_CSI0\_CLK1P/MIPI\_CSI0\_CLK1N, RK3588S 的 PIN AN37/AN38 为 VSS 接地引脚, 所以在兼容上需要注意:

(1) 若在原 RK3588S 的 PCB 上直接贴 RK3588S2, 请打上 RK 提供的兼容补丁, 调整接口映射, 以免引起功能异常。

(2) 针对新设计的 RK3588S2 PCB, 请参考 RK 新发布的 RK3588S2 参考设计, 最多可支持 5 路摄像头接入。

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