PCN
Raspberry Pi Sense HAT revision 2

Raspberry Pi Ltd

Colophon

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Document version history

Release	Date	Description
1.0	10 May 2023	• Initial release

Product Change Note

Notification date

10 May 2023

Title

Update of Raspberry Pi Sense HAT from revision 1 to revision 2

Products Affected

Raspberry Pi Sense HAT

Reason for Change

Addition of a colour sensor.

Fixes issue with LEDs briefly turning on when 5V voltage is present, but the 3V3 supply is missing.

Change Description

Old PCB revision: revision 1

New PCB revision: revision 2

Raspberry Pi Ltd have extensively tested and qualified alternatives which closely match the original parts in terms of specification and performance.

Mechanical (Form, Fit, Function) Changes

The old and new boards are mechanically the same.

Electrical

All electrical features from the previous board have been retained.

There is a new colour sensor on the board.

The revision 2 board has a fix to ensure that when 5V power is applied, but the 3V3 supply from the host Pi is not present (an optional power-down case), the LEDs do not turn on. On the revision 1 board, this could appear as a bright flash from all LEDs during startup.

Software/Firmware Changes Required

This new product revision is supported in Raspberry Pi OS kernel versions from 31 Oct 2022 onwards, version 5.15.74, via `raspberrypi-kernel` package version 1.20221028-1 for Bullseye. There is NO support for the added colour sensor in

Buster/Legacy/Oldstable releases.

You can determine the Linux kernel version in use by typing the following in a terminal prompt:

```
uname -a
```

Raspberry Pi Ltd always recommend using the latest version of firmware and Linux kernel, wherever that is practical. Use the following commands in a terminal prompt to fully upgrade a Raspberry Pi OS installation.

```
sudo apt update
sudo apt full-upgrade
```
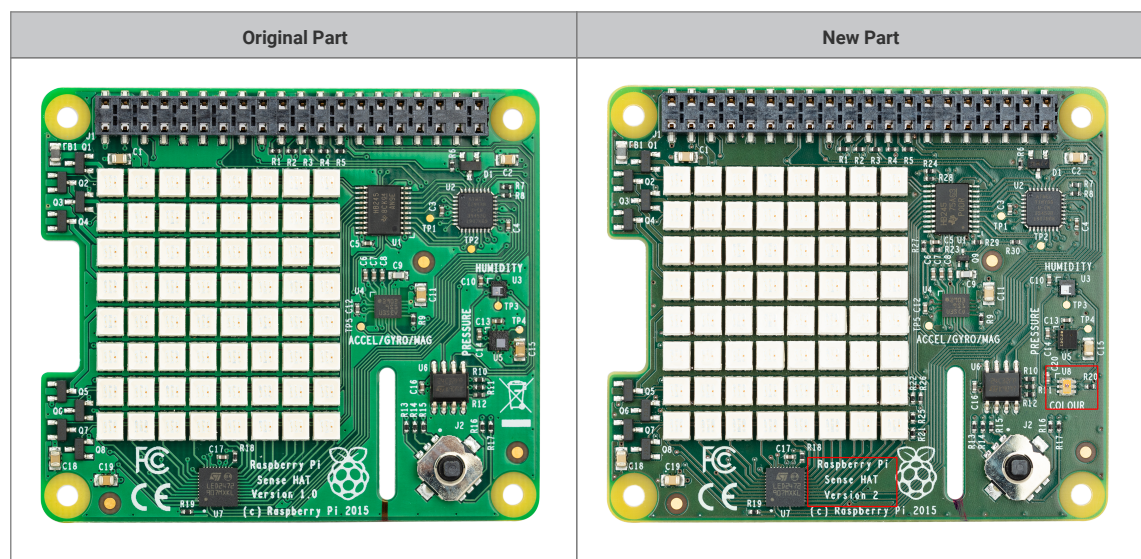
Transition Date(s)

Feb 2022

There will be a transition period where both old and new units are available in the distribution channel.

Identification Method to Distinguish Change

The new product can be distinguished by comparison using the following images. The revision number has changed, and the colour sensor can be seen on the right front of the new board.

Original Part	New Part

Contact Details for more information

Please contact applications@raspberrypi.com if you have any queries about this PCN.

Web: www.raspberrypi.com