Raspberry Pi RPI5 Single Board Computer User Guide

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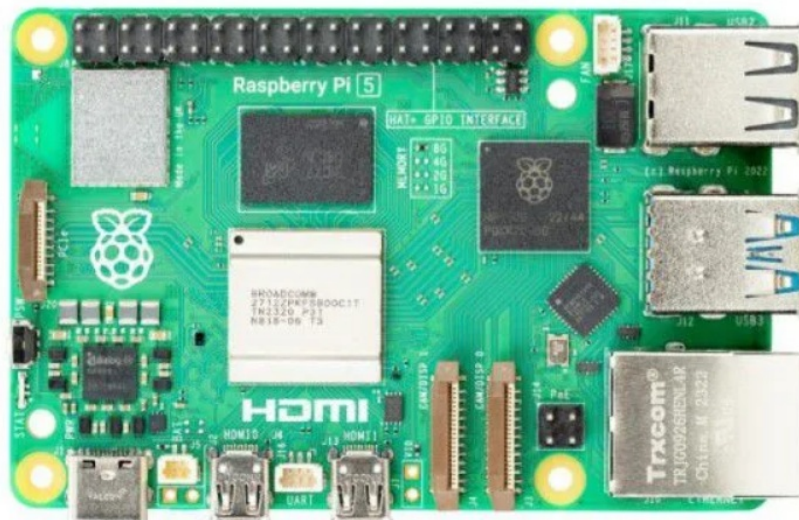
Designed and distributed by Raspberry Pi Ltd
Maurice Wilkes Building
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Cambridge
CB4 0DS
United Kingdom
raspberrypi.com

Contents

SAFETY INSTRUCTIONS

IMPORTANT: PLEASE RETAIN THIS INFORMATION FOR FUTURE REFERENCE

WARNINGS

- Any external power supply used with the Raspberry Pi shall comply with relevant regulations and standards applicable in the country of intended use. The power supply should provide 5V DC and a minimum rated current of 3A.

INSTRUCTIONS FOR SAFE USE

- This product should not be overclocked.
- Do not expose this product to water or moisture, and do not place it on a conductive surface whilst in operation.
- Do not expose this product to heat from any source; it is designed for reliable operation at normal room temperatures.
- Do not expose the board to high intensity light sources (e.g. xenon flash or laser).
- Operate this product in a well-ventilated environment, and do not cover it during use.
- Place this product on a stable, flat, non-conductive surface while in use, and do not let it contact conductive items.
- Take care while handling this product to avoid mechanical or electrical damage to the printed circuit board and connectors.
- Avoid handling this product while it is powered. Only handle by the edges to minimise the risk of electrostatic discharge damage.
- Any peripheral or equipment used with the Raspberry Pi should comply with relevant standards for the country of use and be marked accordingly to ensure that safety and performance requirements are met. Such equipment includes, but is not limited to, keyboards, monitors, and mice.

For all compliance certificates and numbers, please **visit : pip.raspberrypi.com**

EUROPEAN UNION

RADIO EQUIPMENT DIRECTIVE (2014/53/EU) DECLARATION OF CONFORMITY (DOC)

We, Raspberry Pi Ltd, Maurice Wilkes Building, Cowley Road, Cambridge, CB4 0DS, United Kingdom, Declare under our sole responsibility that the product: Raspberry Pi 5 to which this declaration relates is in conformity with the essential requirements and other relevant requirements of the Radio Equipment Directive (2014/53/EU).

The product is in conformity with the following standards and/or other normative documents: SAFETY (art 3.1.a): EC EN 62368-1: 2014 (2nd Edition) and **EN 62311: 2008 EMC** (art 3.1.b): **EN 301 489-1/ EN 301 489-17 Ver. 3.1.1 (assessed in conjunction with ITE standards EN 55032 and EN 55024 as Class B equipment) SPECTRUM** (art 3. 2): **EN 300 328 Ver 2.2.2, EN 301 893 V2.1.0.**

In accordance with Article 10.8 of the Radio Equipment Directive: The device 'Raspberry Pi 5' operates in compliance with harmonised standard EN 300 328 v2.2.2 and transceives within the frequency band 2,400 MHz to 2,483.5 MHz and, as per Clause 4.3.2.2 for wideband modulation type equipment, operates at a maximum e.i.r.p. of 20dBm.

The Raspberry Pi 5 also operates in compliance with harmonised standard EN 301 893 V2.1.1 and transceives within the frequency bands 5150- 5250MHz, 5250-5350MHz, and 5470-5725MHzw and, as per Clause 4.2.3.2 for wideband modulation type equipment, operates at a maximum e.i.r.p. of 23dBm (5150-5350MHz) and 30dBm (5450-5725MHz).

In accordance with Article 10.10 of the Radio Equipment Directive, and as per below list of country codes, the operating bands 5150-5350MHz are strictly for indoor usage only.

BE	BG		CZ	DK
DE	EE		IE	EL
ES	FR	HR	IT	CY
LV	LT	LU	HU	MT
NL	AT	PL	PT	RO
SI	SK	FI	SE	UK

The Raspberry Pi complies with the relevant provisions of the RoHS Directive for the European Union.

WEEE DIRECTIVE STATEMENT FOR THE EUROPEAN UNION

This marking indicates that this product should not be disposed of with other household waste throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmentally safe recycling.

NOTE
A full online copy of this Declaration can be found at **pip.raspberrypi.com**

⚠️**WARNING:** Cancer and Reproductive Harm – **www.P65Warnings.ca.gov**

FCC

Raspberry Pi 5 **FCC ID:** 2ABCB-RPI5

This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation.

CAUTION
Any changes or modifications to the equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment has been tested and found to comply within the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Re-orient or relocate the receiving antenna.

2. Increase the separation between the equipment and receiver.

3. Connect the equipment into an outlet on a different circuit from that to which the receiver is connected.

4. Consult the dealer or an experienced radio/TV technician for help.

For product available in the USA/Canada market, only channel 1–11 can be operated and these channel assignments deal with only the 2.4GHz range.

This device and its antenna(s) must not be co-located or operated in conjunction with any other antenna or transmitter except in accordance with FCC's multitransmitter procedures. If this device is operated in the 5.15–5.25GHz frequency range, then it is restricted to an indoor environment only.

IMPORTANT NOTE

FCC Radiation Exposure Statement: Co-location of this module with another transmitter that operates simultaneously is required to be evaluated using the FCC multi-transmitter procedures.

This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The device contains an integral antenna, hence the device must be installed such that there is a separation distance of at least 20cm from all persons.

LABEL OF THE END PRODUCT

The final end product must be labelled in a visible area with the following: **"Contains TX FCC ID: 2ABCB-RPI5".** If the size of the end product is larger than 8×10cm, then the following FCC part 15.19 statement must also be available on the label:

"This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation."

ISED

Raspberry Pi 5 **IC: 20953-RPI5**
This device complies with Industry Canada license exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause interference.

2. This device must accept any interference, including interference that may cause undesired operation of the device.

For product available in the USA/Canada market, only channels 1 to 11 are available for 2.4GHz WLAN. Selection of other channels is not possible.

This device and its antenna(s) must not be co-located with any other transmitters except in accordance with IC multi-transmitter product procedures. Referring to the multi-transmitter policy, multiple-transmitter(s) and module(s) can be operated simultaneously without reassessment permissive change.

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

IMPORTANT NOTE

IC RADIATION EXPOSURE STATEMENT
This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum separation distance of 20cm between the device and all persons.

INTEGRATION INFORMATION FOR THE OEM

It is the responsibility of the OEM / Host product manufacturer to ensure continued compliance to FCC and ISED Canada certification requirements once the module is integrated in to the Hostproduct. Please refer to FCC KDB 996369 D04 for additional information. The module is subject to the following FCC rule parts: 15.207, 15.209, 15.247, 15.403 and 15.407

HOST PRODUCT USER GUIDE TEXT

FCC COMPLIANCE
This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that causes undesired operation.

CAUTION
Any changes or modifications to the equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply within the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Re-orient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a different circuit from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

For products available in the USA/Canada market, only channels 1 to 11 are available for 2.4GHz WLAN. This device and its antenna(s) must not be co-locatedor operated in conjunction with any other antenna or transmitter except in accordance with FCC's multi-transmitter procedures. This device operates in the 5.15–5.25GHz frequency range and is restricted to indoor use only.

ISED CANADA COMPLIANCE
This device complies with Industry Canada licenseexempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device

For products available in the USA/Canada market, only channels 1 to 11 are available for 2.4GHz WLAN Selection of other channels is not possible.

This device and its antenna(s) must not be co-located with any other transmitters except in accordance with IC multi-transmitter product procedures.

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

IMPORTANT NOTE

IC RADIATION EXPOSURE STATEMENT

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum separation distance of 20cm between the device and all persons.

HOST PRODUCT LABELLING

The host product must be labelled with the following information:

"Contains TX FCC ID: 2ABCB-RPI5"

"Contains IC: 20953-RPI5"

"This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that cause undesired operation."

IMPORTANT NOTICE TO OEMS:
The FCC Part 15 text must go on the Host product unless the product is too small to support a label with the text on it. It is not acceptable just to place the text in the user guide.

E-LABELLING

USER'S MANUAL OF THE END PRODUCT

It is possible for the Host product to use e-labelling providing the Host product supports the requirements of FCC KDB 784748 D02 e-labelling and ISED Canada RSS-Gen, section 4.4.

E-labelling would be applicable for the FCC ID, ISED Canada certification number and the FCC Part 15 text.

CHANGES IN USAGE CONDITIONS OF THIS MODULE

This device has been approved as a Mobile device in accordance with FCC and ISED Canada requirements. This means that there must be a minimum separation distance of 20cm between the Module's antenna and any persons. A change in use that involves a separation distance ≤20cm (Portable usage) between the Module's antenna and any persons is a change in the RF exposure of the module and, hence, is subject to a FCC Class 2 Permissive Change and a ISED Canada Class 4 Permissive Change policy in accordance with FCC KDB 996396 D01 and ISED Canada RSP-100.

As noted above, this device and its antenna(s) must not be co-located with any other transmitters except in accordance with IC multi-transmitter product procedures.

If the device is co-located with multiple antennas, the module could be subject to a FCC Class 2 Permissive Change and a ISED Canada Class 4 Permissive Change policy in accordance with FCC KDB 996396 D01 and ISED Canada RSP-100. In accordance with FCC KDB 996369 D03, section 2.9,test mode configuration information is available from the Module manufacturer for the Host (OEM) product manufacturer.

AUSTRALIA AND NEW ZEALAND

CLASS B EMISSIONS COMPLIANCE STATEMENT

WARNING
This is a Class B product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
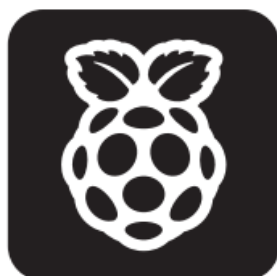
CE UK CA FC ☒ R-NZ ⌀

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FCC ID: 2ABCB-RPI5
IC ID: 20953-RPI5

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Raspberry Pi 5 _ Safety and User Leaflet.indd 2

Documents / Resources

Raspberry Pi RPI5 Single Board Computer [pdf] User Guide
2ABCB-RPI5, 2ABCBRPI5, RPI5, RPI5 Single Board Computer, Single Board Computer, Board Computer, Computer

References

- **Documents - Product Information Portal - Raspberry Pi**
- **Raspberry Pi**
- **P65Warnings.ca.gov**