

*PiCam module for
Raspberry compute module 4*

PiCam Module

Camera-Adapter-Board for Raspberry compute modul 4

- Manual -

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Manual Downloadlink

Manual PiCam module (eng): https://ledato.de/download/picam_manual_eng.pdf

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Introduction

The PiCam module is an adapter board to assemble one of the smallest Raspberry camera systems in the world. You can connect the Raspberry Pi compute module 4 (cm4 and camera, not included) and one of the many different camera sensors related to the Raspberry Pi with a 15-pin RPi connector. It can be easily realized. All you have to do, is plug in the Raspberry cm4 on the bottom of the PiCam board and connect the FFC/FPC ribbon cable of the camera sensor to the FFC connector of the PiCam module. If required, the camera module can also be mounted directly on the PiCam adapter, achieving maximum compactness. The available mounting holes cover a large number or the majority of Raspberry camera modules.



fig.1: PiCam module topview

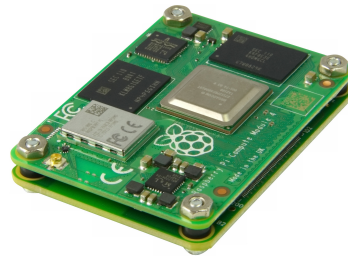


fig.2: PiCam modul bottom with Raspberry cm4 (not included)



Attention

- The Raspberry cm4 must be plugged in such a way that the respective board edges are congruent and with no angle
- The USB socket 'Power' is used exclusively for power supply
- The USB socket 'Data' is used exclusively for access to the existing memory via SSH
- Confusion of the connections (see fig. 3) should be avoided at all costs.

Important Notice

Attention: When connecting a camera sensor, it is essential to make sure, that the 15-pin FFC/FPC cable is connected with the correct orientation! Otherwise, everything - the camera module, the Raspberry Pi compute module 4 and the PiCam module will be irreversibly damaged.

The FFC/FPC connector ('Camera') located on the PiCam module has a double-sided pitch connector for board-to-board connections. As a result, the ribbon cable can be plugged in both with the contacts downwards (facing the board) and upwards, which increases the flexibility for mounting or arranging the camera sensor. The serious factor is the corresponding connections. The +VCC and GND(-) connection have to correspond to those of the PiCam module, even if in individual cases the numbering (1-15) should differ between the connector of the PiCam module and that of the camera module. Do not connect it wrong. If you do it wrong, your Raspberry compute module 4, the PiCam module and the camera sensor will break.

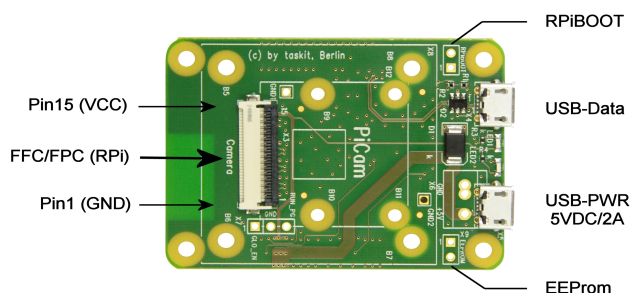


fig.3: PiCam camera side

Programming the Raspberry cm4

Flash-Memory

The flash memory of the compute module 4 can be programmed in the assembled state. In addition to the mandatory power supply via USB-Power, a USB connection must be established between USB-Data (see fig. 3) and a PC. To load an image into the cm4, the jumper position X8 (RpiBOOT) must be short-circuited for example with tweezers for about 5 seconds while switching on power supply. If the PC has recognized the USB device, the desired image can be loaded into the flash memory, for example with the tools "RpiBoot" and Win32Diskimager.

EEprom

With the "Jumper" X9 (EEPROM) the write protection of the serial EEPROM located on the compute module 4 can be removed. For this purpose, X9 must be short-circuited for example with tweezers.

Technical Data

Dimension:	56,1 x 40,3 x 10,2 (length x width x height) mm
Weight:	8,8g
Interfaces:	2x USB (Power & Data), 1x 15pol. FFC/FPC-Connector (Rpi)
Power Supply:	5 Volt DC / 2A max.
Consumption:	0,14 mA

Declaration of Conformity for Europe

Regarding following products:

General name of the product: PiCam module

Art.-Nr.: 547657

We declare that they comply with the following directives of the European Community:

Conformity according to EMC Directive 2014/30/EU
European Conformity According to EMC-Directive 2014/30/EU

Conformity according to EMV Directive 2014/30/EU

The product to which this statement refers corresponds to the following standards or normative documents of electromagnetic compatibility.

Safety/

Health: EN 62368-1:2016-05
EN 62479:2011-09

EMV: EN 301 489-1 V2.1.1:2017-02
EN 301 489-17 V3.1.1:2017-02

RoHS: EU-Directive 2011/65/EU

Due to the directive 2014/30/EU as described in the conformity assessment procedure described, the retail equipment should be labelled as follows:



The retail equipment must meet the actual safety / health requirements according to gen. standards.