Home Assistant Yellow

Datasheet v1.3

September 2022

- Dimensions: 124mm x 124mm x 35mm (LxWxH)
- Weight
  - Device: 270g (including heatsink, without PSU/Ethernet cable)
  - Package: 600g (Home Assistant Yellow SKU, including CM4, packaging, PSU and Ethernet cable)
- Enclosure
  - Polycarbonate Plastic
  - Color: Semi-Transparent

- Raspberry Pi Compute Module 4 (CM4002016) (Home Assistant Yellow only)
  - Broadcom BCM2711
    - 4xCortex-A72 (ARMv8) 64-bit
    - 1.5GHz
  - 2GB LPDDR4-3200 SDRAM with ECC
  - 16GB eMMC Flash memory
  - Gigabit Ethernet PHY supporting IEEE 1588
- Gigabit Ethernet
  - PoE+ IEEE 802.3at-2009 Class 3 or 4 (Home Assistant Yellow Kit PoE only)
- SiLabs MGM210P (MGM210PA32JIA2) Multiprotocol Wireless Module
  - Supported Protocols
    - Zigbee 3.0
    - OpenThread
  - Wireless System-on-Chip
    - 2405-2480 MHz
    - Built-in chip antenna with 1.86 dBi peak-gain
    - TX power up to +20 dBm
    - 32-bit ARM Cortex®-M33 with DSP
    - 1024 kB flash program memory
    - 96 kB RAM data memory
  - Receiver Performance
    - 103.9 dBm sensitivity (1% PER) at 250 kbps O-QPSK DSSS
  - Regulatory Certifications CE/FCC
    - FCC-ID: QOQGM210P
- M.2 Socket M-Key
  - Supports 2230/2242/2260/2280 modules
  - PCIe x1
- 2x USB 2.0 Type-A Host ports, 5V up to 1.5A (combined)
- 1x USB-C, supporting USB 2.0/1.1 device mode, power draw <100mA@5V
  - Debug USB-to-Serial adapter mode by default
  - Muxable to CM4 USB 2.0 interface for USB boot (recovery)
- High quality Stereo Audio DAC
  - 2V RMS Line-out on 3.5mm Audio Jack
  - SNR 106dB

- - Dynamic Range 106dB
- RTC backed by CR2032 battery
- Status LEDs (all software controlled)
  - Red (CM4 power LED)
  - Green (CM4 activity LED)
  - Yellow (CM4 status LED)
  - Blue (MGM210P activity LED)
- Power
  - 12V DC Power Jack max. 2.5A (IEC 60130-10 Type A 5.5 mm OD, 2.1 mm ID)
  - Ethernet: PoE+ IEEE 802.3at-2009 Class 4 (Home Assistant Yellow Kit PoE only)
    - Up to 25.5W PD input at 48V DC, max 600 mA