

250x122, 2.13inch E-Ink display HAT for Raspberry Pi

SKU: 12915

Part Number: 2.13inch e-Paper HAT

Brand: Waveshare



250x122, 2.13inch E-Ink display HAT for Raspberry Pi, SPI interface

Overview

This is an E-Ink display HAT for Raspberry Pi, 2.13inch, 250x122 resolution, with embedded controller, communicating via SPI interface, supports partial refresh.

Due to the advantages like ultra low power consumption, wide viewing angle, great effect under sunlight, it is an ideal choice for applications such as shelf label, industrial instrument, and so on.

Features

- No backlight, keeps displaying last content for a long time even when power down
- Ultra low power consumption, basically power is only required for refreshing
- Compatible with Raspberry Pi 2B/3B/Zero/Zero W
- Preserved solder pads for SPI interface, for connecting with other controller boards like Arduino/Nucleo, etc.
- Comes with development resources and manual (examples for Raspberry Pi/Arduino/STM32)

Specifications

- Operating voltage: 3.3V
- Interface: SPI
- Outline dimension: 65mm × 30.2mm
- Display size: 23.71mm × 48.55mm
- Dot pitch: 0.194 × 0.194
- Resolution: 250 × 122
- Display color: black, white
- Grey level: 2
- Refresh power: 26.4mV(typ.)
- Standby power: <0.17mV
- Viewing angle: >170°

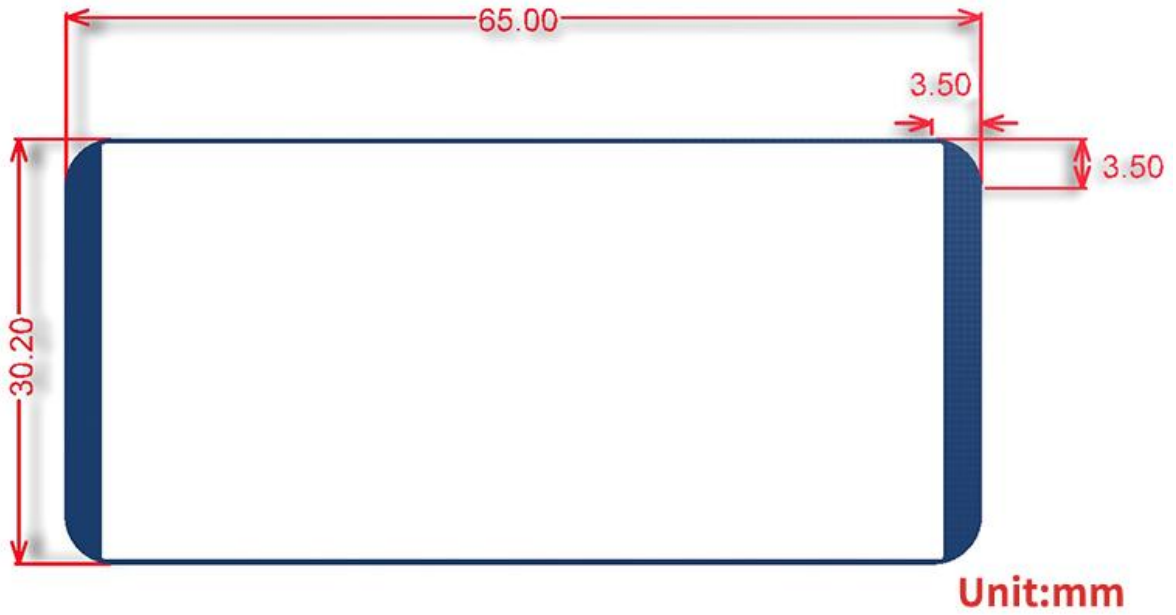
Interface

SYMBOL	DESCRIPTION
VCC	3.3V
GND	Ground
NC	NC
DIN	SPI MOSI pin
CLK	SPI SCK pin
CS	SPI chip selection, low active
DC	Data/Command selection (high for data, low for command)
RST	External reset, low active
BUSY	Busy status output, low active

Demo



Dimensions



Development Resources

Wiki : www.waveshare.com/wiki/2.13inch_e-Paper_HAT

Selection Guide

Part Number	Grey Level	Resolution	Display size (mm)	Outline Dimension (mm)	Partial Refresh	Interface
1.54inch e-Paper Module	2	200x200	27.60 × 27.60	48.0 × 33.0	√	3-line SPI / 4-line SPI
2.13inch e-Paper HAT	2	250x122	48.55 × 23.71	65.0 × 30.2	√	3-line SPI / 4-line SPI
2.9inch e-Paper Module	2	296x128	66.89 × 29.05	89.5 × 38.0	√	3-line SPI / 4-line SPI
4.3inch e-Paper UART Module	4	800x600	88.00 × 66.00	118.0 × 75.0	×	UART