

# 296x128, 2.9inch E-Ink display module

**SKU:** 12956

**Part Number:** 2.9inch e-Paper Module

**Brand:** Waveshare



296x128, 2.9inch E-Ink display module, SPI interface

## Overview

This is an E-Ink display module, 2.9inch, 296x128 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
- SPI interface, for connecting with controller boards like Raspberry Pi/Arduino/Nucleo, etc.
- Comes with development resources and manual (examples for Raspberry Pi/Arduino/STM32)

## Specifications

- Operating voltage: 3.3V
- Interface: 3-wire SPI, 4-wire SPI
- Outline dimension: 89.5mm × 38mm
- Display size: 66.89mm × 29.05mm

- Dot pitch:  $0.138 \times 0.138$
- Resolution:  $296 \times 128$
- Display color: black, white
- Grey level: 2
- Refresh power: 26.4mV(typ.)
- Standby power:  $<0.17\text{mV}$
- Viewing angle:  $>170^\circ$

## Interface

SYMBOL	DESCRIPTION
VCC	3.3V
GND	Ground
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

## Dimensions



## Development Resources

**Wiki :** [www.waveshare.com/wiki/2.9inch\\_e-Paper\\_Module](http://www.waveshare.com/wiki/2.9inch_e-Paper_Module)

## Selection Guide

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