



DESCRIPTION

PACKAGE CONTENT



1.28inch Round LCD Display Module with Touch panel, 240×240 Resolution, IPS, SPI And I2C Communication

SKU: 24155
Part Number: 1.28inch Touch LCD
Brand: Waveshare

\$18.99

1

ADD TO CART


| | |
|---------|------|
| \$18.59 | 10+ |
| \$18.39 | 50+ |
| \$18.31 | 100+ |

?

Help

Related Products:

































Share:

1.28inch Round LCD Display Module With Touch Panel, 240×240 Resolution, IPS, SPI And I2C Communication

| DESCRIPTION | PACKAGE CONTENT |
|--|-----------------|
| <h1>1.28inch Touch LCD Display Module</h1> <p>Embedded GC9A01 Driver And CST816S Capacitive Touch Control Chip Using SPI And I2C Communication Respectively</p> <p>Comes with examples for Raspberry Pi, Raspberry Pi Pico, Arduino, STM32, etc.</p> | |



| | | | |
|-------------------------------------|-------------------------------------|------------------------------------|-----------------------------------|
| Size 1.28" | Resolution 240×240 | Display Color 65K | Display Panel IPS |
| Display Driver GC9A01 | Display Interface SPI | Touch Driver CST816S | Touch Interface I2C |

Features At A Glance

- 240×240 resolution, 65K colors, clear and colorful displaying effect
- High touch screen transmittance, fast response and long lifetime

- Embedded GC9A01 driver chip and CST816S capacitive touch control chip, using SPI and I2C communication respectively, minimizes required IO pins, supports controller boards like Raspberry Pi/Raspberry Pi Pico/Arduino/STM32
 - Comes with online development resources and manual (examples for Raspberry Pi/Raspberry Pi Pico/Arduino/STM32)
- DESCRIPTION
- PACKAGE CONTENT

Specifications

| | | | |
|-------------------|--------------------------|-------------------|------------------|
| OPERATING VOLTAGE | 3.3V / 5V | RESOLUTION | 240 × 240 pixels |
| DISPLAY DRIVER | GC9A01 | DISPLAY INTERFACE | 4-wire SPI |
| TOUCH DRIVER | CST816S | TOUCH INTERFACE | I2C |
| DISPLAY PANEL | IPS | TOUCH TYPE | Capacitive |
| DISPLAY SIZE | Φ32.4mm | PIXEL SIZE | 0.135 × 0.135 mm |
| MODULE SIZE | 39.89 × 38.50mm Φ38.50mm | | |

Small Size, Touch More Possibilities

Suitable For Various Smart Devices Development, Can Realize Human-Computer Interaction Function

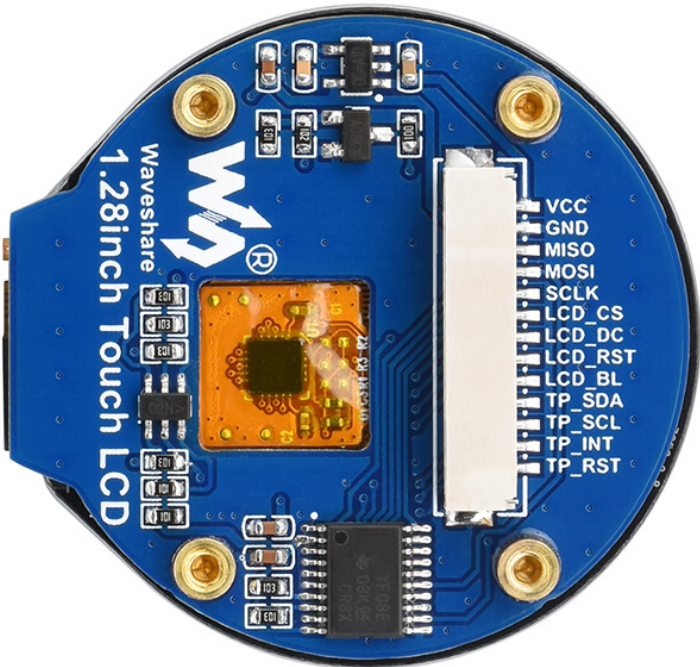


Control Interfaces

For Use With Controller Boards Like Raspberry Pi / Raspberry Pi Pico / Arduino / STM32

DESCRIPTION

PACKAGE CONTENT



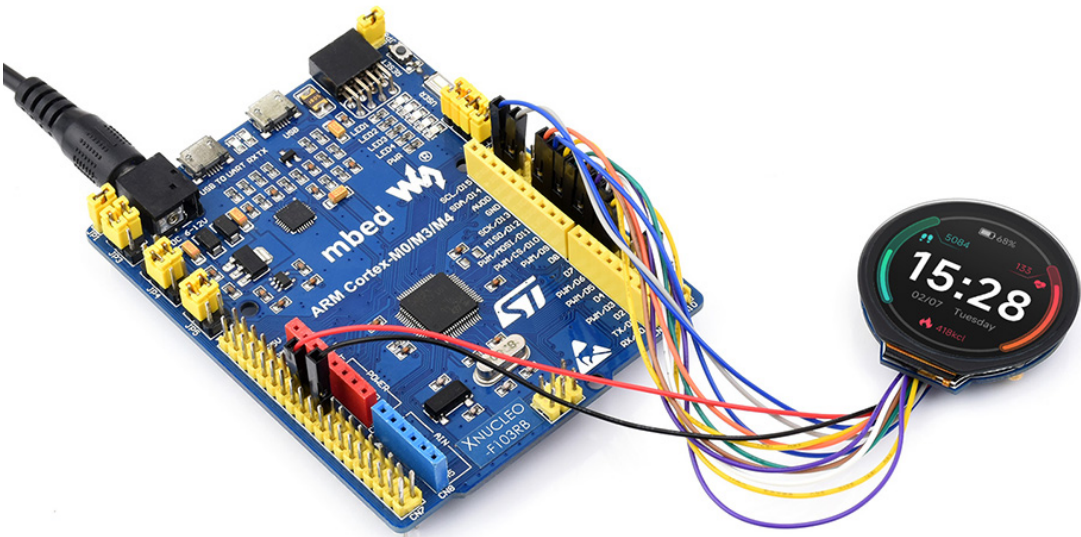
| | |
|---------|---|
| VCC | Power (3.3V / 5V input) |
| GND | Ground |
| MISO | SPI MISO pin |
| MOSI | SPI MOSI pin |
| SCLK | SPI Clock pin |
| LCS_CS | LCD Chip Selection, low active |
| LCS_DC | LCD Data/Command selection (high for data, low for command) |
| LCS_RST | LCD Reset, low active |
| LCS_BL | LCD Backlight |
| TP_SDA | TP Data pin |
| TP_SCL | TP Clock pin |
| TP_INT | TP Interrupt pin |
| TP_RST | TP Reset, low active |

Pin Connection Reference

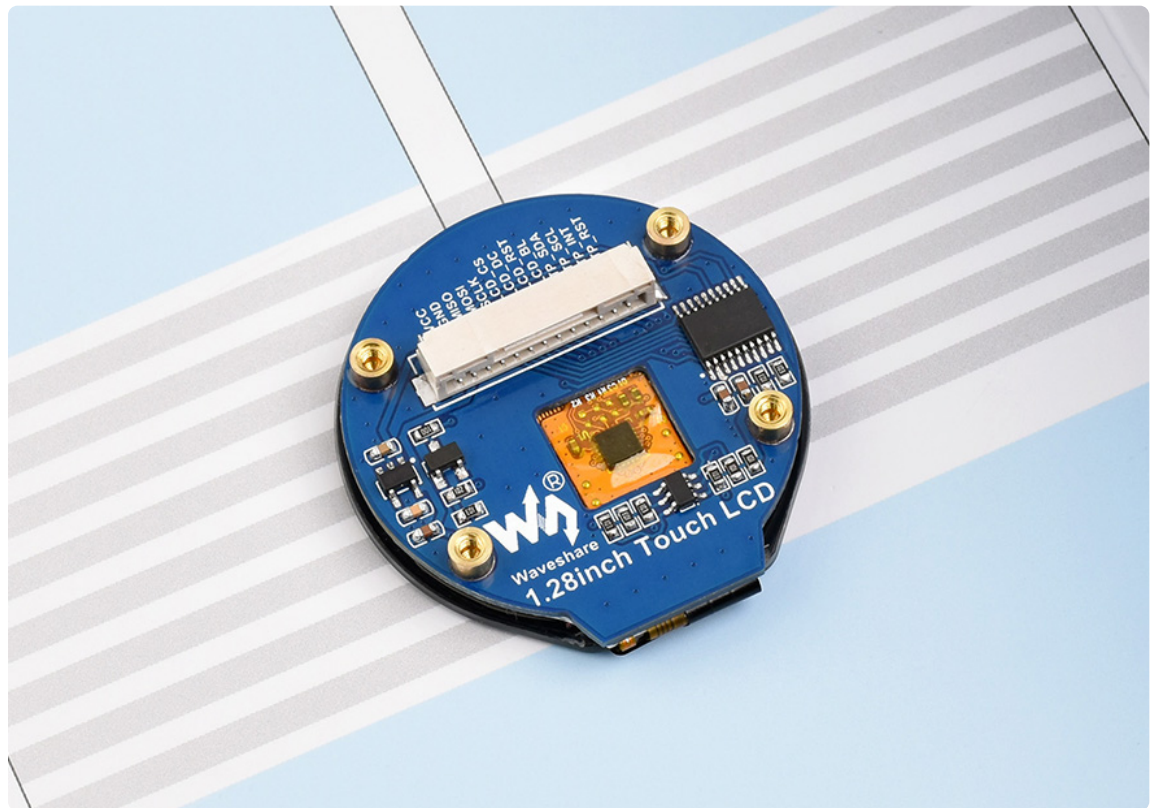
| | | | | |
|--------------------|--------------------|------|---------|-------|
| 1.28INCH TOUCH LCD | RASPBERRY PI (BCM) | PICO | ARDUINO | STM32 |
| VCC | 3.3V | 3.3V | 5V | 3.3V |

| GND | DESCRIPTION | GND | GND | PACKAGE CONTENT | GND |
|---------|-------------|-----|------|-----------------|------|
| MISO | | 9 | GP12 | 12 | PA6 |
| MOSI | | 10 | GP11 | 11 | PA7 |
| SCLK | | 11 | GP10 | 13 | PA5 |
| LCS_CS | | 8 | GP9 | 10 | PB6 |
| LCS_DC | | 25 | GP14 | 7 | PA8 |
| LCS_RST | | 27 | GP8 | 8 | PA9 |
| LCS_BL | | 18 | GP15 | 9 | PC7 |
| TP_SDA | | 2 | GP6 | SDA | PB9 |
| TP_SCL | | 3 | GP7 | SCL | PB8 |
| TP_INT | | 4 | GP17 | 3 | PB10 |
| TP_RST | | 17 | GP16 | 4 | PA10 |

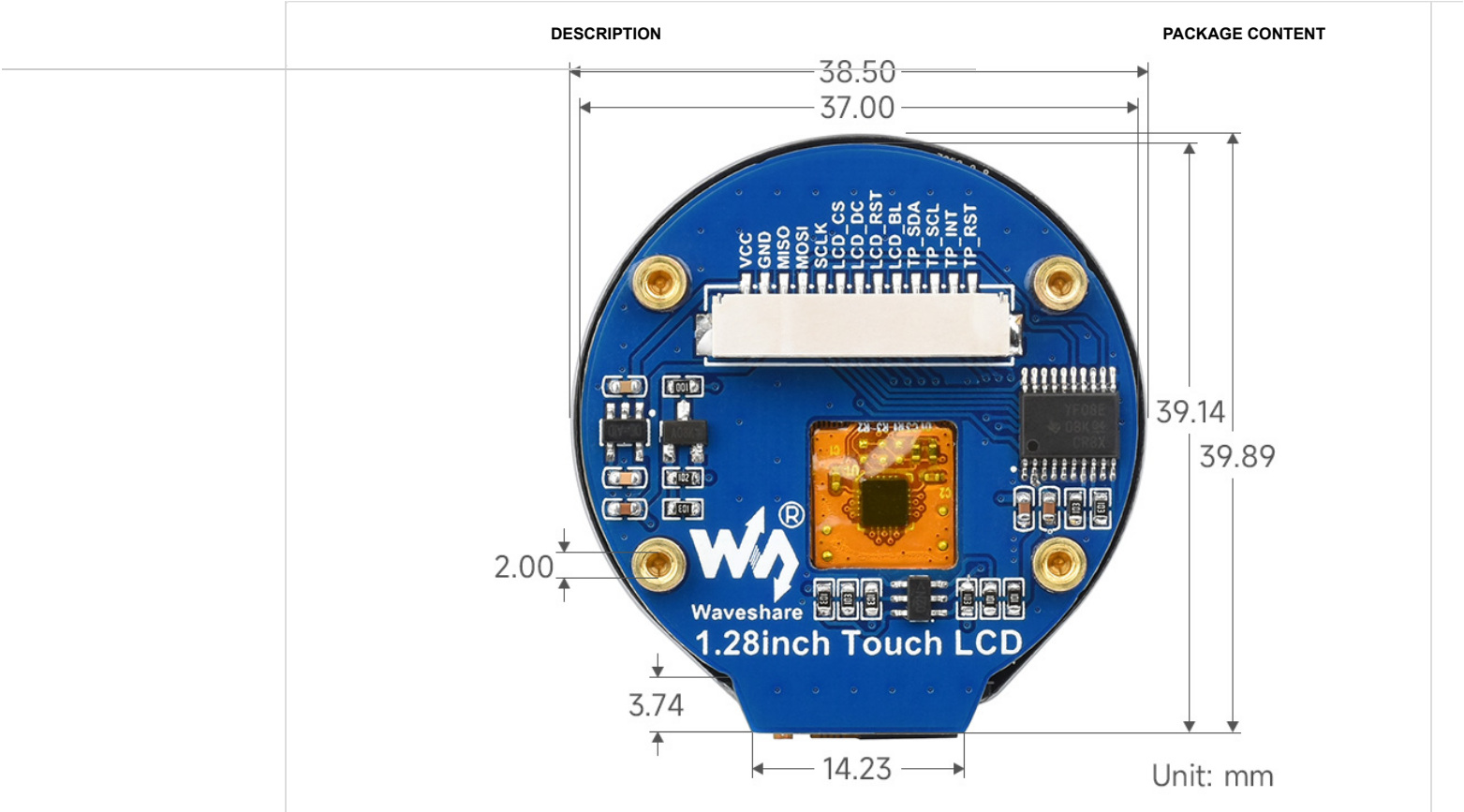
Usage Example



Product Show



Outline Dimensions



Resources & Services



WAVESHARE
ORIGINAL



PROFESSIONAL
TECH SUPPORT



RICH RESOURCES
MANUAL & DEMO

Wiki: www.waveshare.com/wiki/1.28inch_Touch_LCD

Selection Guide

| PART NUMBER | TYPE | COLOR | RESOLUTION | DISPLAY SIZE (MM×MM) | INTERFACES | DRIVER | DIMENSION (MM×MM) | PINHEADER |
|--|------|---------------------------------------|------------|----------------------|-----------------------------|---------|-------------------|-------------------|
| 0.91inch OLED Module | OLED | White | 128×32 | 22.38×5.58 | I2C | 1306 | 36.0×12.5 | PH2.0 connector |
| 0.95inch RGB OLED (A) | OLED | 65K colorful | 96×64 | 20.14×13.42 | SPI(4-wire SPI) | 1331 | 31.7×37.0 | angled/horizontal |
| 0.95inch RGB OLED (B) | OLED | 65K colorful | 96×64 | 20.14×13.42 | SPI(4-wire SPI) | 1331 | 31.7×37.0 | straight/vertical |
| 0.96inch LCD Module | IPS | 65K colorful | 160×80 | 21.70×10.80 | 4-wire SPI | ST7735S | 32.5×26.0 | PH2.0 connector |
| 0.96inch OLED (A) | OLED | 1/4 yellow section, 3/4 blue section* | 128×64 | 21.7×11.2 | 3-wire SPI, 4-wire SPI, I2C | 1306 | 33.0×33.5 | angled/horizontal |
| 0.96inch OLED (B) | OLED | 1/4 yellow section, 3/4 blue section* | 128×64 | 21.7×11.2 | 3-wire SPI, 4-wire SPI, I2C | 1306 | 33.0×33.5 | straight/vertical |
| 0.96inch OLED Module (C) | OLED | 1/4 yellow section, 3/4 blue section* | 128×64 | 21.74×11.18 | 4-wire SPI, I2C | SSD1315 | 26.0×26.0 | straight/vertical |
| 0.96inch OLED Module (D) | OLED | White | 128×64 | 21.74×11.18 | 4-wire SPI, I2C | SSD1315 | 26.0×26.0 | straight/vertical |
| 0.96inch OLED Module (E) | OLED | Blue | 128×64 | 21.74×11.18 | 4-wire SPI, I2C | SSD1315 | 26.0×26.0 | straight/vertical |

| | 0.96inch RGB OLED Module | OLED | DESCRIPTION | 64×128 | 10.862×21.736 | 3/4-wire SPI | SSD1357 | 24.0×24.0 | GH1.25 connector |
|---|--------------------------|---------------------|-----------------------|---------|---------------|-----------------------------|-----------------|---------------------|-------------------|
| | 1.14inch LCD Module | IPS | 65K colorful | 240×135 | 24.91×14.86 | 4-wire SPI | ST7789 | 35.0×32.0 | PH2.0 connector |
| | 1.27inch RGB OLED Module | OLED | 262K colorful | 128×96 | 25.708×19.28 | 3/4-wire SPI | SSD1351 | 42.2×29.0 | GH1.25 connector |
| | 1.28inch LCD Module | IPS | 65K colorful | 240×240 | Φ32.4mm | 4-wire SPI | GC9A01 | 40.4×37.5 Φ37.5 | PH2.0 connector |
| | 1.28inch Touch LCD | IPS (with touch) | 65K colorful | 240×240 | Φ32.4mm | 4-wire SPI, I2C | GC9A01, CST816S | 39.89×38.5 Φ38.5 | GH1.25 connector |
| | 1.3inch LCD Module | IPS | 65K colorful | 240×240 | 23.40×23.40 | 4-wire SPI | ST7789 | 45.0×31.0 | PH2.0 connector |
| | 1.3inch OLED (A) | OLED | Blue | 128×64 | 29.42×14.7 | 3-wire SPI, 4-wire SPI, I2C | SH1106 | 40.5×37.5 | angled/horizontal |
| | 1.3inch OLED (B) | OLED | Blue | 128×64 | 29.42×14.7 | 3-wire SPI, 4-wire SPI, I2C | SH1106 | 40.5×37.5 | straight/vertical |
| | 1.3inch OLED Module (C) | OLED | White | 64×128 | 14.70×29.42 | 4-wire SPI, I2C | SH1107 | 30.0×39.5 | PH2.0 connector |
| | 1.32inch OLED Module | OLED | White (16 gray scale) | 128×96 | 26.86×20.14 | 4-wire SPI, I2C | SSD1327 | 34.3×30.5 | GH1.25 connector |
| | 1.47inch LCD Module | LCD | 262K colorful | 172×320 | 17.39×32.35 | 4-wire SPI | ST7789V3 | 22.0×38.5 | PH2.0 connector |
| | 1.5inch OLED Module | OLED | White (16 gray scale) | 128×128 | 26.86×26.86 | 4-wire SPI, I2C | 1327 | 44.5×37.0 | PH2.0 connector |
| | 1.5inch OLED Module (B) | OLED | White | 128×128 | 26.855×26.855 | 4-wire SPI, I2C | SH1107 | 38.5×44.5 | GH1.25 connector |
| | 1.5inch RGB OLED Module | OLED | 65K colorful | 128×128 | 26.86×26.86 | 3-wire SPI, 4-wire SPI | 1351 | 44.5×37.0 | PH2.0 connector |
| | 1.54inch LCD Module | IPS | 65K colorful | 240×240 | 27.72×27.72 | 4-wire SPI | ST7789 | 50.0×35.0 | PH2.0 connector |
| | 1.54inch OLED Module | OLED | White | 128×64 | 35.05×17.52 | 4-wire SPI, I2C | SSD1309 | 43.0×37.5 | GH1.25 connector |
| | 1.54inch OLED Module (B) | OLED | Blue | 128×64 | 35.05×17.52 | 4-wire SPI, I2C | SSD1309 | 43.0×37.5 | GH1.25 connector |
| | 1.69inch LCD Module | IPS | 262K colorful | 240×280 | 27.97×32.63 | 4-wire SPI | ST7789V2 | 31.5×39.0 | GH1.25 connector |
| | 1.8inch LCD Module | TFT | 65K colorful | 128×160 | 34.50×28.30 | 4-wire SPI | ST7735S | 56.5×34.0 | PH2.0 connector |
| | 1.9inch LCD Module | IPS | 262K colorful | 170×320 | 22.70×42.72 | 4-wire SPI | ST7789V2 | 51.2×27.3 | GH1.25 connector |
| | 2inch LCD Module | IPS | 262K colorful | 240×320 | 30.60×40.80 | 4-wire SPI | ST7789 | 58.0×35.0 | PH2.0 connector |
| | 2.4inch LCD Module | TFT | 65K colorful | 240×320 | 36.72×48.96 | 4-wire SPI | ILI9341 | 70.5×43.3 | PH2.0 connector |
| *Note: the 0.96inch OLED consists of 1/4 yellow upper section and 3/4 blue lower section, not a regular dual-color display. | | | | | | | | | |