RGB-Matrix-P2-64x64

From Waveshare Wiki
Jump to: navigation, search

> This product only includes a screen panel and needs to be displayed with main control boards such as Raspberry Pi, ESP32, and Arduino.

RGB-Matrix-P2-64x64

(https://www.waveshare.com/rgb-matrix-p2-64x64.htm)

RGB LED, 64x64=4096 DOTS, 2mm Pitch
I/Os

Overview

Introduction

This product is a 64×64 full-color LED matrix display, with 4096 RGB LEDs on board, 2mm pitch, supports Raspberry Pi, Arduino, ESP32, etc., provides supporting open source demos and tutorials, suitable for makers or electronics enthusiasts getting started Learning, or DIY secondary development into other desktop or wall-mounted display applications.

Features

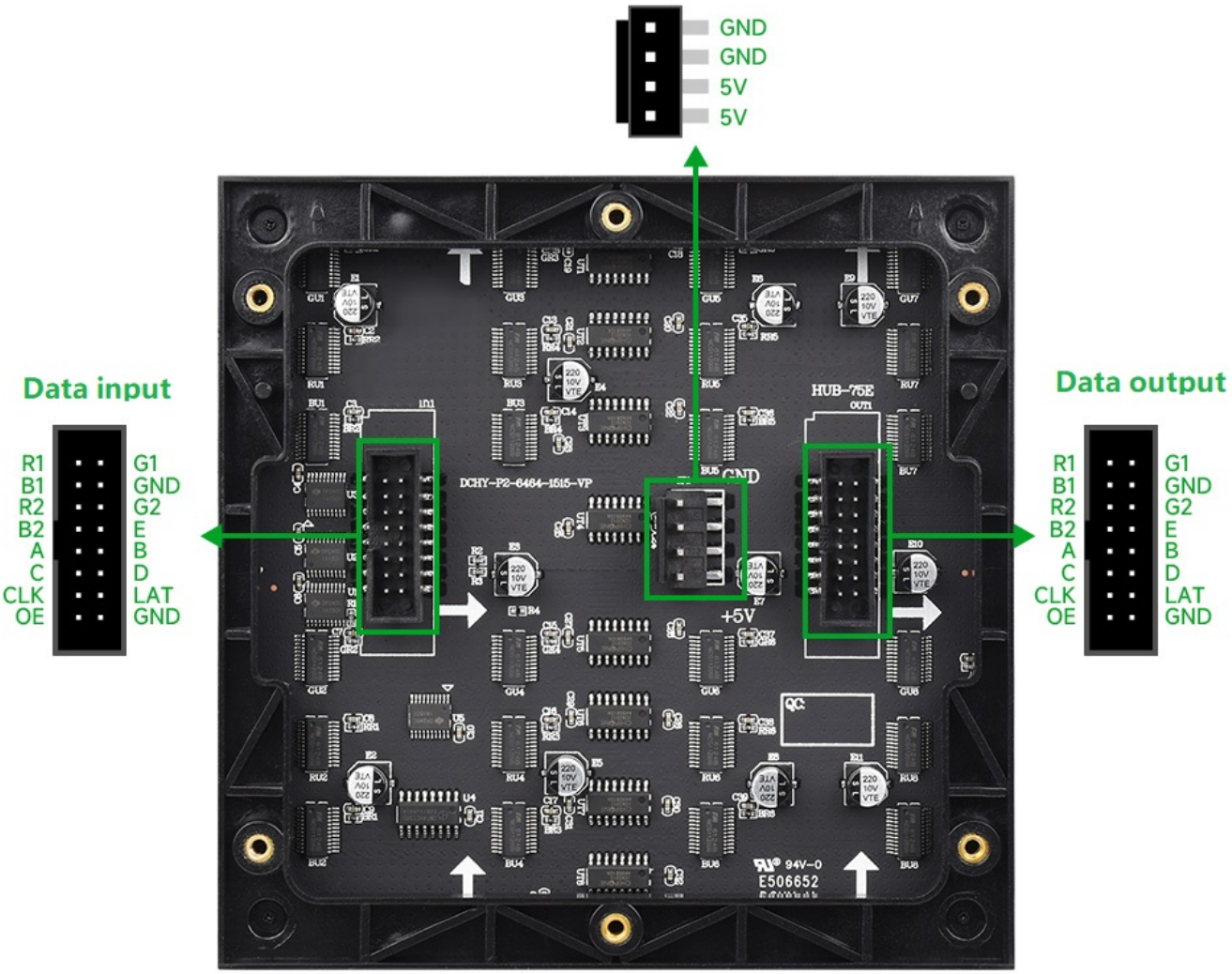
- 4096 individual RGB LEDs, full-color display, adjustable brightness.
- 64×64 pixels, 2mm pitch, allows displaying text, colorful image, or animation.
- 128×128mm dimensions, moderate size, suitable for DIY desktop display or wall mount display.
- Onboard two HUB75 header, one for controller data input, one for output, chain support.
- Provides online open-source development resources (examples for Raspberry Pi / Raspberry Pi Pico / ESP32 / Arduino).

Parameters

Dimensions	128mm × 128mm
Pixel	64×64=4096 DOTS
Pitch	2mm

Pixel Form	1R1G1B
Viewing Angle	≥140°
Control Type	Synchronization
Driving	1/32 scan
Header	HUB75
Power Supply	5V / 3A (VH4 header input)
Power	≤15W

Pinout Difinition



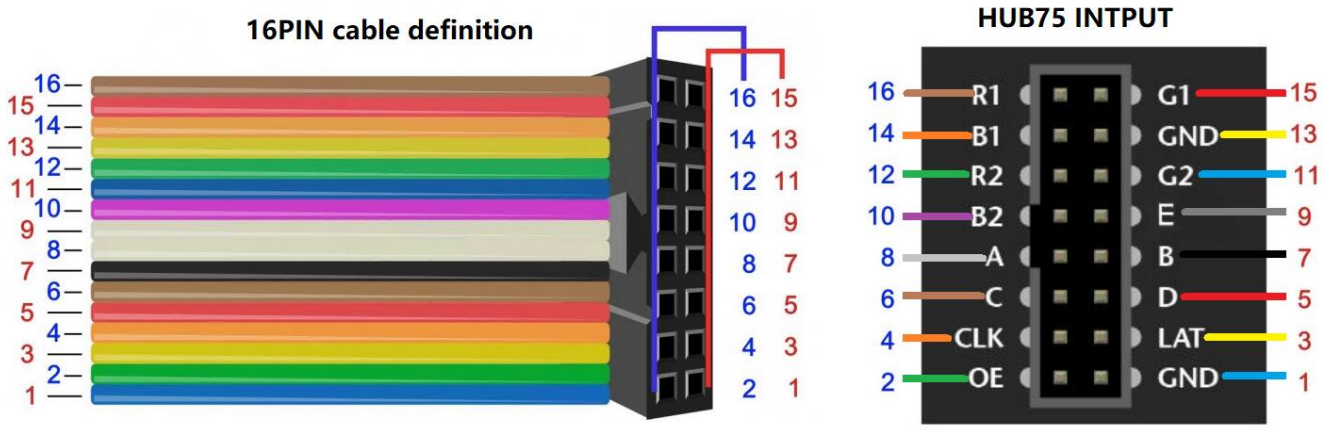
(/wiki/File:RGB-Matrix-P2-64x6403.jpg)

The picture on the back is for reference only. Different batches of PCB board silk screen and layout may have minor adjustments, and the software is compatible. The actual arrival shall prevail.

PIN	Description		PIN	Description
+5V	5V power input		**GND**	Ground
R1	R higher bit data		**R2**	R lower bit data
G1	G higher bit data		**G2**	G lower bit data
B1	B higher bit data		**B2**	B lower bit data
A	A line selection		**B**	B line selection
C	C line selection		**D**	D line selection
E	E line selection		**CLK**	Clock input
LAT/STB	Latch pin		**OE**	Output enable

Note: The power port (VCC and GND) of the display is powered by 5V, do not connect to other voltages, so as not to burn out the display.

16P Cable Interface Definition



(/wiki/File:RGB-Matrix-P2-64x6408.jpg)

Development Board Compatibility Notes