

## BOM for HUB75 ESP32 WeMos-Matrix-Shield-DMA v1.9a - 2/19/2025

Part	Qty	Value	Package	Description
C2, C3	2	47uF	0805	Capacitor
C4	1	220uF	5mm dia x 12mm - 2mm lead pitch	Filter cap
CN2, CN4, CN5, CN6	4	WeMOS ESP32	1X10 or 2x10 Female	Pin header 1x10 0.1" spacing or 2x10 header mount on top side
D3	1	1N5817W or equiv.	SOD-123	Silicon rectifier diode
J1	1	I2C - 0.1"	1X4	I2C connector for Dupont or other 0.1" header
J2	1	I2C GROVE	1X4 2.0mm	Grove standard header for I2C
J3	1	I2C QWIIC - 3.3V	SM04B-SRSS-TB(LF)(SN) - SPARKFUN 4417	SMD R/A connector for QWIIC or Stemma (bottom side)
JP1	1	DNP	PCB Jumper Pads	Solder Jumper for E signal on HUB75
JP3	1	DNP	PCB Jumper Pads	Solder Jumper for I2C voltage
JP2	1	HUB75	2X8 Female	Mount on bottom
GPIO	6	2x5 header	2x5 0.1" pitch	GPIO header
R1	1	10K	0805	Resistor for LDR
R3, R4	2	DNP	0805	Optional 4.7k I2C pullup-resistors
U1	1	LDR	3mm pitch - 5mm dia.	Amazon B0CM5YNGSF - 10k LDR
X1	1	OSTYK42102030	0.325" pitch x 2	Screw Barrier Block - pins centered under screw
X2	1	S4P-VH / B4P-VH	JST VH	Vert. or Horiz. 3.96mm (0.156") pitch with locking ramp
X3	1	5.5 x 2.1mm PTH	POWER_JACK	Power Jack standard PTH @ 5.5 x 2.1 or 2.5mm
PCB	1	V1.9a PCB		