IC1 — 74HCT245DW

Pin	Signal		Pin	Signal
2	OE	A1 B1	18	OE_0_BUF
3	CLOCK	A2 B2	17	CLOCK_0_BUF
4	P0_B2	A3 B3	16	P0_B2_BUF
5	P0_R2	A4 B4	15	P0_R2_BUF
6	P0_G2	A5 B5	14	P0_G2_BUF
7	P0_B1	A6 B6	13	P0_B1_BUF
8	P0_R1	A7 B7	12	P0_R1_BUF
9	P0_G1	A8 B8	11	P0_G1_BUF
1	+5V	DIR		
19	GND	G		

IC2 — 74HCT245DW

Pin	Signal		Pin	Signal
2	OE	A1 B1	18	OE_1_BUF
3	CLOCK	A2 B2	17	CLOCK_1_BUF
4	P1_B2	A3 B3	16	P1_B2_BUF
5	P1_R2	A4 B4	15	P1_R2_BUF
6	P1_G2	A5 B5	14	P1_G2_BUF
7	P1_B1	A6 B6	13	P1_B1_BUF
8	P1_R1	A7 B7	12	P1_R1_BUF
9	P1_G1	A8 B8	11	P1_G1_BUF
1	+5V	DIR		
19	GND	G		

IC3 — 74HCT245DW

Pin	Signal		Pin	Signal
2	OE	A1 B1	18	OE_2_BUF
3	CLOCK	A2 B2	17	CLOCK_2_BUF
4	P2_B2	A3 B3	16	P2_B2_BUF
5	P2_R2	A4 B4	15	P2_R2_BUF
6	P2_G2	A5 B5	14	P2_G2_BUF
7	P2_B1	A6 B6	13	P2_B1_BUF
8	P2_R1	A7 B7	12	P2_R1_BUF
9	P2_G1	A8 B8	11	P2_G1_BUF
1	+5V	DIR		
19	GND	G		

IC4 — 74HCT245DW

Pin	Signal		Pin	Signal
2	ROW_E	A1 B1	18	ROW_E_BUF
3	STROBE	A2 B2	17	STROBE_2_BUF
4	STROBE	A3 B3	16	STROBE_1_BUF
5	ROW_D	A4 B4	15	ROW_D_BUF
6	ROW_C	A5 B5	14	ROW_C_BUF
7	ROW_A	A6 B6	13	ROW_A_BUF
8	ROW_B	A7 B7	12	ROW_B_BUF
9	STROBE	A8 B8	11	STROBE_0_BUF
1	+5V	DIR		
19	GND	G		

SV1

Left	Pin	Pin	Right
P0_R1_BUF	1	2	P0_G1_BUF
P0_B1_BUF	3	4	SEL-PIN4
P0_R2_BUF	5	6	P0_G2_BUF
P0_B2_BUF	7	8	SEL-PIN8
ROW_A_BUF	9	10	ROW_B_BUF
ROW_C_BUF	11	12	ROW_D_BUF
CLOCK_0_BUF	13	14	STROBE_0_BUF
OE_0_BUF	15	16	GND

SV2

Left	Pin	Pin	Right
P1_R1_BUF	1	2	P1_G1_BUF
P1_B1_BUF	3	4	SEL-PIN4
P1_R2_BUF	5	6	P1_G2_BUF
P1_B2_BUF	7	8	SEL-PIN8
ROW_A_BUF	9	10	ROW_B_BUF
ROW_C_BUF	11	12	ROW_D_BUF
CLOCK_1_BUF	13	14	STROBE_1_BUF
OE_1_BUF	15	16	GND

SV3

Left	Pin	Pin	Right
P2_R1_BUF	1	2	P2_G1_BUF
P2_B1_BUF	3	4	SEL-PIN4
P2_R2_BUF	5	6	P2_G2_BUF
P2_B2_BUF	7	8	SEL-PIN8
ROW_A_BUF	9	10	ROW_B_BUF
ROW_C_BUF	11	12	ROW_D_BUF
CLOCK_2_BUF	13	14	STROBE_2_BUF
OE_2_BUF	15	16	GND

JP4 — R1 10k, +5V

Left	Pin	Pin	Right
P2_G1	1	2	
P2_B1	3	4	
STROBE	5	6	
	7	8	P2_R1
CLOCK	9	10	ROW_E
	11	12	OE
P0_G1	13	14	
ROW_A	15	16	ROW_B
	17	18	ROW_C
P0_B2	19	20	
P0_G2	21	22	ROW_D
P0_R1	23	24	P0_R2
	25	26	P0_B1
	27	28	
P1_G1	29	30	
P1_B1	31	32	P1_R1
P1_G2	33	34	
P1_R2	35	36	P2_G2
P2_R2	37	38	P1_B2
	39	40	P2_B2
GND			GND

JP5

	Pin	Pin	
ROW_E_BUF			
SEL-PIN4	1	2	
	3	4	SEL-PIN8
	5	6	
GND			

Power / Decoupling

X2-1 WAGO2060-1402 +5V
X2-2 WAGO2060-1402
C5 22u · C1 100n (IC1P) · C2 100n (IC2P) · C3 100n (IC3P) · C4 100n (IC4P)
VCC 20 / GND 10
GND

H3 MOUNT-HOLE3.2
H4 MOUNT-HOLE3.2
H1 MOUNT-HOLE3.2
H2 MOUNT-HOLE3.2

open hardware