VGA Switcher

+5V
K1 Relay 1
5 4 Red1
2 1 RedOut
2 3 Red2

+5V
K2 Relay 2
5 4 Green1
2 1 GreenOut
2 3 Green2

+5V
K3 Relay 3
5 4 Blue1
2 1 BlueOut
2 3 Blue2

+5V
K4 Relay 4
5 4 VSync1
2 1 VSyncOut
2 3 VSync2

+5V
K5 Relay 5
5 4 HSync1
2 1 HSyncOut
2 3 HSync2

LED2
D1 1N4007
R8 150
R3 1K
C1 47uF
Q1 BC547B
+5V
R2 10K
U2 ULN2003AN
1 16
2 15
3 14
4 13
5 12
6 11
7 10
8 9
+5V
GND
VSync2

ESP32 Module

3.3V
GND
C4 100uF
GND

U1 ESP-32S
1 GND   GND 39
2 3V3   GND 38
3 EN   IO23 37
4 SENSOR_VP   IO22 36
5 SENSOR_VN   TXD0 35 RX
6 IO34   RXD0 34 TX
7 IO35   IO21 33
8 IO32   NC 32
9 IO33   IO19 31 Green1
10 IO25   IO18 30
11 IO26   IO5 29   B1
12 IO27   IO17 28 B2
13 IO14   IO16 27 B3
14 IO12   IO4 26   IR
15 GND   IO0 25   IO0
16 IO13   IO2 24
17 SHD/SD2   SDI/SD1 23 IR
18 SWP/SD3   SDO/SD0 22
19 SCS/CMD   SCK/CLK 20

HSync1
VSync1
Blue1
Red1
R9 100 R10 100
LED4
LED3
GND

KEY

3.3V
R1 12K
IO0
R4 470
SW1 Flash
4 3
2 1
GND

3.3V
R6 12K
EN
R5 470
SW4 Reset
4 3
2 1
GND

Power

3.3V
U3 AMS1117-3.3
4 Vout
Vout Vout
Vin
GND/ADJ
+5V
C3 10uF
C2 10uF
GND

U4 7805
IN GND OUT
1 2 3
+5V
J1 12V
C5 220uF C7 100nF C8 100nF C6 220uF
GND

Connection Ports

ID3
HSyncOut
VSyncOut
VSync2
ID1
ID0
ID2
GND
Key
BG
GG
RG
GND
GND
BlueOut
GreenOut
Blue2
RedOut
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
DSUB2 VGA-OUTPUT

ID3
HSync2
VSync2
ID1
ID0
ID2
GND
Key
GG
BG
RG
GND
GND
Green2
Blue2
Red2
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
DSUB1 VGA-INPUT

+5V
R7 150
B1
B2
B3
LED2
LED3
LED4
IR
3.3V
IO0
10 9 8 7 6 5 4 3 2 1 H3
GND
Header-Male-2.54_1x10

RX
TX
IO0
1 2 3 4 H1
GND
Flash Port

UI Board

SW2 Reset
4 3
2 1
SW3 Reset
4 3
2 1
SW5 Reset
4 3
2 1
333-2SURD/S530-A3
LED2
333-2SURD/S530-A3
LED1
3ARG9HWA
LED3
IR1 VS1838B
OUT GND VCC
1 2 3
10 9 8 7 6 5 4 3 2 1 H2
Header-Male-2.54_1x10