

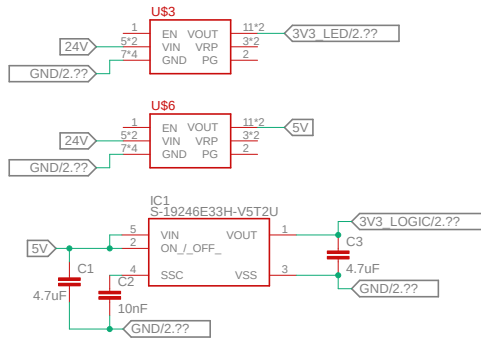
Power

The image displays three circuit diagrams illustrating power supply connections for different integrated circuits (ICs).

U3: A red-outlined IC with pins 1, 5, 2, 7, 4, 3, 2, and 2. It is connected to a 24V source and GND/2.?? through pins 1, 5, 2, 7, 4, 3, 2, and 2. The output is connected to 3V3 LED/2.?? through pin 11*2.

U6: A red-outlined IC with pins 1, 5, 2, 7, 4, 3, 2, and 2. It is connected to a 24V source and GND/2.?? through pins 1, 5, 2, 7, 4, 3, 2, and 2. The output is connected to 5V through pin 11*2.

IC1: A black-outlined IC labeled S-19246E33H-V5T2U. It has pins 5, 2, 4, 3, 1, 3, and 2. The input is connected to a 5V source through pin 5. The output is connected to 3V3 LOGIC/2.?? through pin 1. The IC is also connected to GND/2.?? through pins 2, 4, 3, and 2. The input is also connected to GND/2.?? through pins 2, 4, 3, and 2. The output is also connected to GND/2.?? through pins 2, 4, 3, and 2.



Slip Ring

IC5
TXS0104EDR

3V3_LOGIC 1 2 3 4 5 6 7 8 9 10 11 12 13 14 5V

PI_TX_SR A1 B1 12 PI_TX_SR

PI_RX_SR A2 B2 11 PI_RX_SR

ENC_POS_SR A3 B3 10 ENC_POS_SR

A4 B4 9

NC_1 NC_2 8 3V3_LOGIC

GND OE 7

R5 10k

3V3_LOGIC 5V

C34 0.1uF C35 0.1uF

PI_RX_SR

C36 10pF C37 0.1uF

J15

6 PI_TX_SR

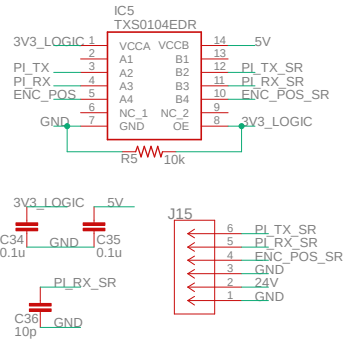
5 PI_RX_SR

4 ENC_POS_SR

3 GND

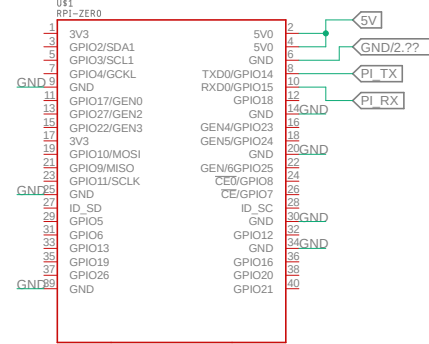
2 24V

1 GND



U51
RPI-ZERO

1	3V3	5V0	2	5V
3	GPIO2/SDA1	5V0	4	GND[2.??]
5	GPIO3/SCL1	GND	6	
7	GPIO4/GCKL	TXD0/GPIO14	8	PI TX
GND 9	GND	RXD0/GPIO15	10	PI RX
11	GPIO17/GEN0	GPIO18	14	GND
13	GPIO27/GEN2	GND	16	
15	GPIO22/GEN3	GEN4/GPIO23	18	
17	3V3	GEN5/GPIO24	20	GND
19	GPIO10/MOSI	GND	22	
21	GPIO9/MISO	GEN6/GPIO25	24	
23	GPIO11/SCLK	CE0/GPIO8	26	
GND 25	GND	CE1/GPIO7	28	
27	ID_SD	ID_SC	30	GND
29	GPIO5	GND	32	
31	GPIO6	GPIO12	34	GND
33	GPIO13	GND	36	
35	GPIO19	GPIO16	38	
37	GPIO26	GPIO20	40	
GND 39	GND	GPIO21		

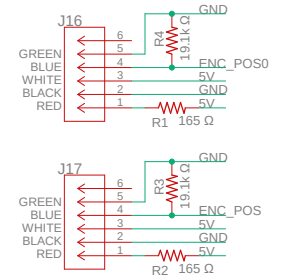


Encoder

The image shows two circuit diagrams for an encoder, labeled J16 and J17. Both diagrams show a 6-pin connector with the following color coding and connections:

- GREEN:** Pin 6, connected to GND.
- BLUE:** Pin 5, connected to GND.
- WHITE:** Pin 4, connected to GND.
- BLACK:** Pin 3, connected to GND.
- RED:** Pin 2, connected to GND.
- Pin 1:** Connected to a 5V supply through resistor R1 (165 Ω).
- Pin 6:** Connected to a 5V supply through resistor R4 (19.1 kΩ).
- Pin 5:** Connected to a 5V supply through resistor R3 (19.1 kΩ).
- Pin 4:** Connected to a 5V supply through resistor R2 (165 Ω).
- Pin 3:** Connected to a 5V supply through resistor R1 (165 Ω).
- Pin 2:** Connected to a 5V supply through resistor R2 (165 Ω).
- Pin 1:** Connected to a 5V supply through resistor R3 (19.1 kΩ).
- Pin 6:** Connected to a 5V supply through resistor R4 (19.1 kΩ).

The diagrams are identical, showing the same wiring for J16 and J17. The only difference is the label of the connector (J16 vs J17).



HDMI Decoder

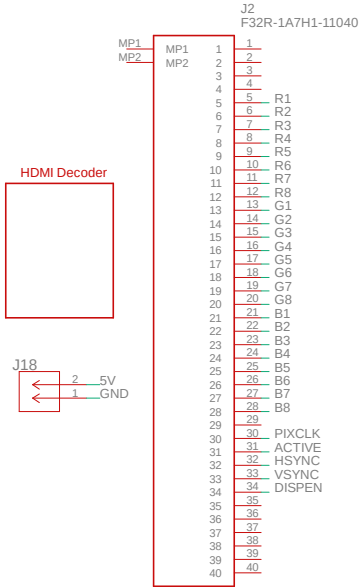
J18

MP1 MP2

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

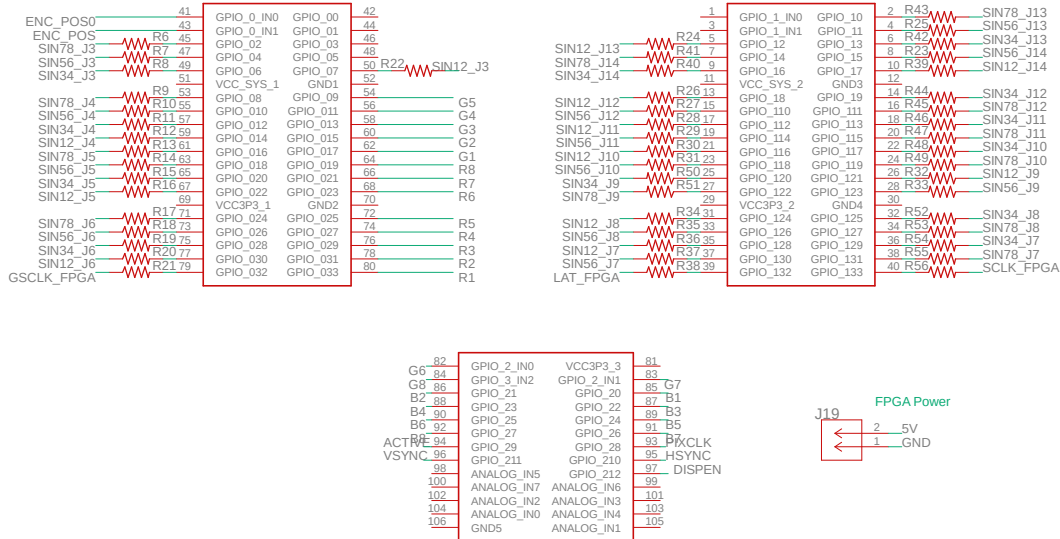
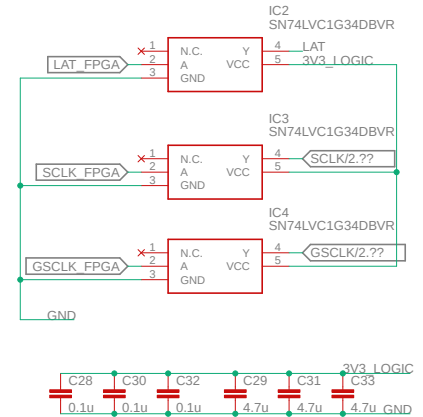
R1 R2 R3 R4 R5 R6 R7 R8 G1 G2 G3 G4 G5 G6 G7 G8 B1 B2 B3 B4 B5 B6 B7 B8 PIXCLK ACTIVE HSYNC VSYNC DISPEN

2 5V 1 GND



FPGA

ENC_POS0 41
ENC_POS 43
ENC_POS R6 45
SIN78_J3 R7 47
SIN56_J3 R8 49
SIN34_J3 51
SIN78_J4 R9 53
SIN56_J4 R10 55
SIN34_J4 R11 57
SIN12_J4 R12 59
SIN78_J5 R13 61
SIN56_J5 R14 63
SIN34_J5 R15 65
SIN12_J5 R16 67
SIN78_J6 R17 69
SIN56_J6 R18 71
SIN34_J6 R19 73
SIN12_J6 R20 75
SIN78_J7 R21 77
SIN56_J7 R22 79
SIN34_J7 R23 81
SIN12_J7 R24 83
SIN78_J8 R25 85
SIN56_J8 R26 87
SIN34_J8 R27 89
SIN12_J8 R28 91
SIN78_J9 R29 93
SIN56_J9 R30 95
SIN34_J9 R31 97
SIN12_J9 R32 99
SIN78_J10 R33 101
SIN56_J10 R34 103
SIN34_J10 R35 105
SIN12_J10 R36 107
SIN78_J11 R37 109
SIN56_J11 R38 111
SIN34_J11 R39 113
SIN12_J11 R40 115
SIN78_J12 R41 117
SIN56_J12 R42 119
SIN34_J12 R43 121
SIN12_J12 R44 123
SIN78_J13 R45 125
SIN56_J13 R46 127
SIN34_J13 R47 129
SIN12_J13 R48 131
SIN78_J14 R49 133
SIN56_J14 R50 135
SIN34_J14 R51 137
SIN12_J14 R52 139
SIN78_J15 R53 141
SIN56_J15 R54 143
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SIN12_J15 R56 147
SIN78_J16 R57 149
SIN56_J16 R58 151
SIN34_J16 R59 153
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SIN78_J17 R61 157
SIN56_J17 R62 159
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SIN12_J17 R64 163
SIN78_J18 R65 165
SIN56_J18 R66 167
SIN34_J18 R67 169
SIN12_J18 R68 171
SIN78_J19 R69 173
SIN56_J19 R70 175
SIN34_J19 R71 177
SIN12_J19 R72 179
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SIN56_J21 R78 191
SIN34_J21 R79 193
SIN12_J21 R80 195
SIN78_J22 R81 197
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SIN78_J23 R85 205
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SIN78_J24 R89 213
SIN56_J24 R90 215
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SIN34_J25 R95 225
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SIN12_J63

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LED Matrix Connections

