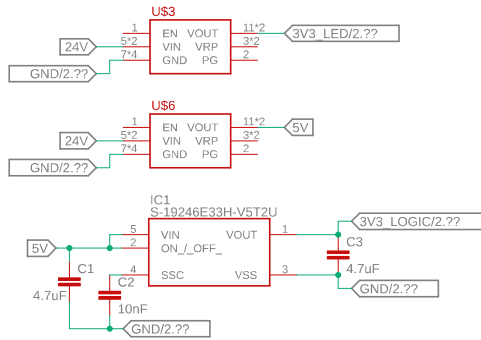
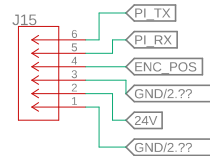


Power



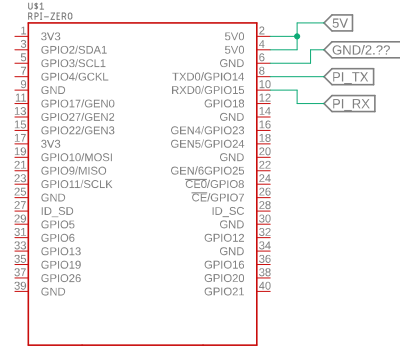
Slip Ring

The diagram illustrates a 6-pin slip ring connection. On the left, a vertical red bracket labeled 'J15' indicates the connector. Six red arrows point from the slip ring to the right, labeled with pin numbers 6, 5, 4, 3, 2, and 1 from top to bottom. On the right, six green lines connect the pins to specific components: Pin 6 to 'PI_TX', Pin 5 to 'PI_RX', Pin 4 to 'ENC_POS', Pin 3 to 'GND/2.??', Pin 2 to '24V', and Pin 1 to 'GND/2.??'.

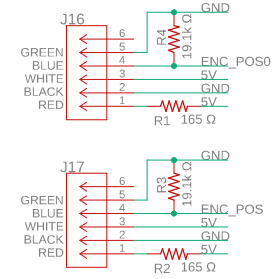


Pinout diagram for Raspberry Pi 3B+ showing GPIO pins 1-40 and their functions. The diagram includes a red box highlighting pins 1-40 and a green box highlighting pins 1-10. A 5V supply is connected to pin 1, and GND is connected to pin 6. The diagram also shows connections for TX and RX pins.

Pin	Function	Pin	Function
1	3V3	2	5V
3	GPIO2/SDA1	3	5V
5	GPIO3/SCL1	4	5V
7	GPIO4/GCLK	6	GND
9	GND	8	TXD0/GPIO14
11	GPIO17/GEN0	9	RXD0/GPIO15
13	GPIO27/GEN2	10	GPIO18
15	GPIO22/GEN3	11	GND
17	3V3	12	GEN4/GPIO23
19	GPIO10/MOSI	13	GEN5/GPIO24
21	GPIO9/MISO	14	GND
23	GPIO11/SCLK	15	GEN6/GPIO25
25	GND	16	CE0/GPIO8
27	ID_SD	17	CE/GPIO7
29	GPIO5	18	ID_SC
31	GPIO6	19	GND
33	GPIO13	20	GPIO12
35	GPIO19	21	GND
37	GPIO26	22	GPIO16
39	GND	23	GPIO20
		24	GPIO21



Encoder



HDMI

J2
F32R-1A7H1-11040

MP1
MP2

HDMI Decoder

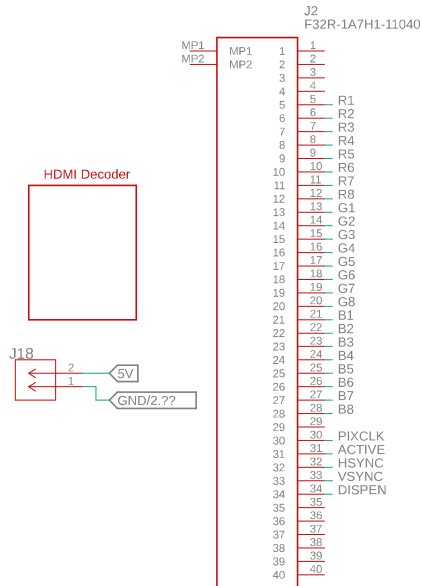
J18

5V

GND/2.??

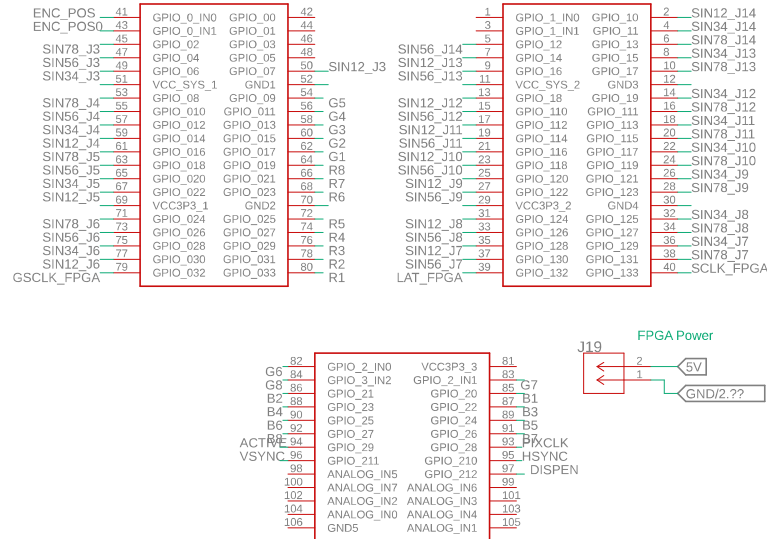
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39
40

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

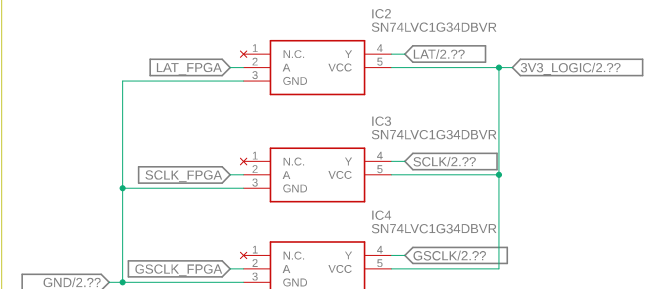


The diagram shows the pinout for the ENCLOSURE module. It includes connections for position sensors (ENC_POS, ENC_POSQ), sine wave inputs (SIN78, SIN56, SIN54), and various internal signals (G6, G8, B2, B8, B4, B6, B5, ACTR, VSYN, ANALOG, GND5). The pins are organized into two main columns, with some pins shared between different modules (e.g., SIN78_J4, SIN56_J4, SIN34_J4, SIN78_J5, SIN56_J5, SIN34_J5, SIN12_J5, SIN78_J6, SIN56_J6, SIN34_J6, SIN12_J6).

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
41	ENC_POS	42	GPIO_0_IN0	1	GPIO_1_IN0	2	SIN12_J14
43	ENC_POSQ	44	GPIO_0_IN1	3	GPIO_1_IN1	4	SIN34_J14
45	SIN78_J3	46	GPIO_02	5	GPIO_12	6	SIN78_J14
47	SIN56_J3	48	GPIO_04	7	GPIO_14	8	SIN34_J13
49	SIN54_J3	50	GPIO_06	9	GPIO_16	10	SIN78_J13
51	SIN34_J3	52	GPIO_07	11	VCC3_SYS_2	12	GND8
53	VCC3_SYS_1	54	GND2	13	GPIO_18	14	SIN34_J12
55	SIN78_J4	56	GPIO_09	15	GPIO_19	16	SIN78_J12
57	SIN56_J4	58	GPIO_010	17	GPIO_110	18	SIN34_J11
59	SIN34_J4	60	GPIO_012	19	GPIO_112	20	SIN78_J11
61	SIN12_J4	62	GPIO_014	21	GPIO_114	22	SIN34_J10
63	SIN78_J5	64	GPIO_016	23	GPIO_116	24	SIN78_J10
65	SIN56_J5	66	GPIO_018	25	GPIO_118	26	SIN34_J9
67	SIN34_J5	68	GPIO_020	27	SIN12_J9	28	SIN78_J9
69	SIN12_J5	70	GPIO_022	29	GPIO_122	30	GND4
71	VCC3P3_1	72	GND2	31	VCC3P3_2	32	GND4
73	SIN78_J6	74	GPIO_024	33	GPIO_124	34	SIN78_J8
75	SIN56_J6	76	GPIO_026	35	GPIO_126	36	SIN34_J7
77	SIN34_J6	78	GPIO_028	37	GPIO_128	38	SIN78_J7
79	SIN12_J6	80	GPIO_030	39	GPIO_130	40	SCLK_FPGA
	GSCLK_FPGA	81	GPIO_032	41	GPIO_132		
		82	GPIO_033				
		83	GND5				
		84	G6				
		85	G8				
		86	B2				
		87	B8				
		88	B4				
		89	B6				
		90	B5				
		91	B5				
		92	ACTR				
		93	VSYN				
		94	ANALOG_IN5				
		95	ANALOG_IN7				
		96	ANALOG_IN9				
		97	ANALOG_IN3				
		98	ANALOG_IN0				
		99	ANALOG_IN1				
		100	ANALOG_IN2				
		101	ANALOG_IN4				
		102	ANALOG_IN6				
		103	ANALOG_IN8				
		104	ANALOG_IN10				
		105	ANALOG_IN12				
		106	ANALOG_IN14				
		107	ANALOG_IN16				
		108	ANALOG_IN18				
		109	ANALOG_IN20				
		110	ANALOG_IN22				
		111	ANALOG_IN24				
		112	ANALOG_IN26				
		113	ANALOG_IN28				
		114	ANALOG_IN30				
		115	ANALOG_IN32				
		116	ANALOG_IN34				
		11					



Logic Buffers



LED Matrix Connections

