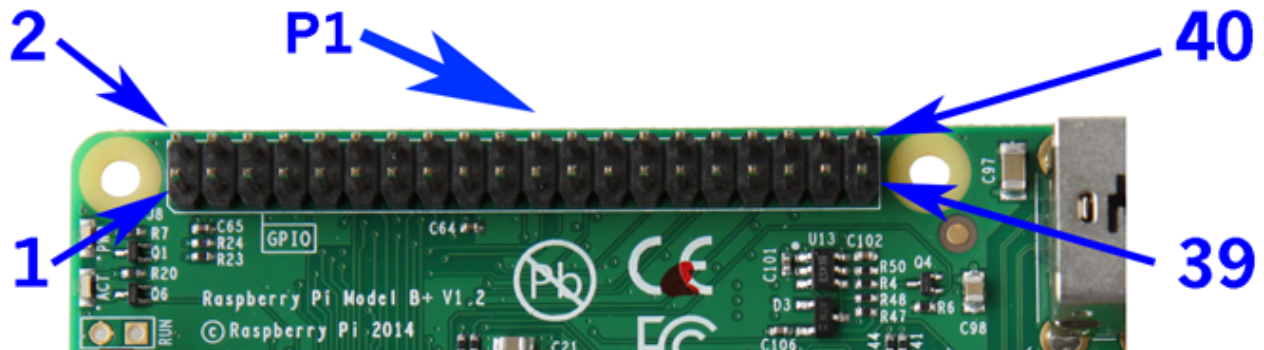


Raspberry pi board GPIO pinout

B+



Connector P1 sorted by GPIO pin number B+

Raspy pin	GPIO	Pull	Alt0	Alt1	Alt2	Alt3	Alt4	Alt5
3	GPIO2	High	SDA1	SA3	<reserved>			
5	GPIO3	High	SCL1	SA2	<reserved>			
7	GPIO4	High	GPCLK0	SA1	<reserved>			ARM_TDI
29	GPIO5	High	GPCLK1	SAC	<reserved>			ARM_TDO
31	GPIO6	High	GPCLK2	SOE_N/SE	<reserved>			ARM_RTCK
26	GPIO7	High	SPI0_CE1_N	SWE_N / SRW_N	<reserved>			
24	GPIO8	High	SPI0_CE0_N	SD0	<reserved>			
21	GPIO9	Low	SPI0_MISO	SD1	<reserved>			
19	GPIO10	Low	SPI0_MOSI	SD2	<reserved>			
23	GPIO11	Low	SPI0_SCLK	SD3	<reserved>			
32	GPIO12	Low	PWM0	SD4	<reserved>			ARM_TMS
33	GPIO13	Low	PWM1	SD5	<reserved>			ARM_TCK
8	GPIO14	Low	TXD0	SD6	<reserved>			TXD1
10	GPIO15	Low	RXD0	SD7	<reserved>			RXD1
36	GPIO16	Low	<reserved>	SD8	<reserved>	CTS0	SPI1_CE2_N	CTS1
11	GPIO17	Low	<reserved>	SD9	<reserved>	RTS0	SPI1_CE1_N	RTS1
12	GPIO18	Low	PCM_CLK	SD10	<reserved>	BSCSL_SDA / MOSI	SPI1_CE0_N	PWM0
35	GPIO19	Low	PCM_FS	SD11	<reserved>	BSCSL_SCL / SCLK	SPI1_MISO	PWM1
38	GPIO20	Low	PCM_DIN	SD12	<reserved>	BSCSL / MISO	SPI1_MOSI	GPCLK0
40	GPIO21	Low	PCM_DOUT	SD13	<reserved>	BSCSL / CE_N	SPI1_SCLK	GPCLK1
15	GPIO22	Low	<reserved>	SD14	<reserved>	SD1_CLK	ARM_TRST	
16	GPIO23	Low	<reserved>	SD15	<reserved>	SD1_CMD	ARM_RTCK	
18	GPIO24	Low	<reserved>	SD16	<reserved>	SD1_DAT0	ARM_TDO	
22	GPIO25	Low	<reserved>	SD17	<reserved>	SD1_DAT1	ARM_TCK	
37	GPIO26	Low	<reserved>	<reserved>	<reserved>	SD1_DAT2	ARM_TDI	
13	GPIO27	Low	<reserved>	<reserved>	<reserved>	SD1_DAT3	ARM_TMS	
27	ID_SD							
28	ID_SC							
1	+3,3 V							
17	+3,3 V							
2	+5 V							
4	+5 V							
6	GND							
9	GND							

14	GND							
20	GND							
25	GND							
30	GND							
34	GND							
39	GND							

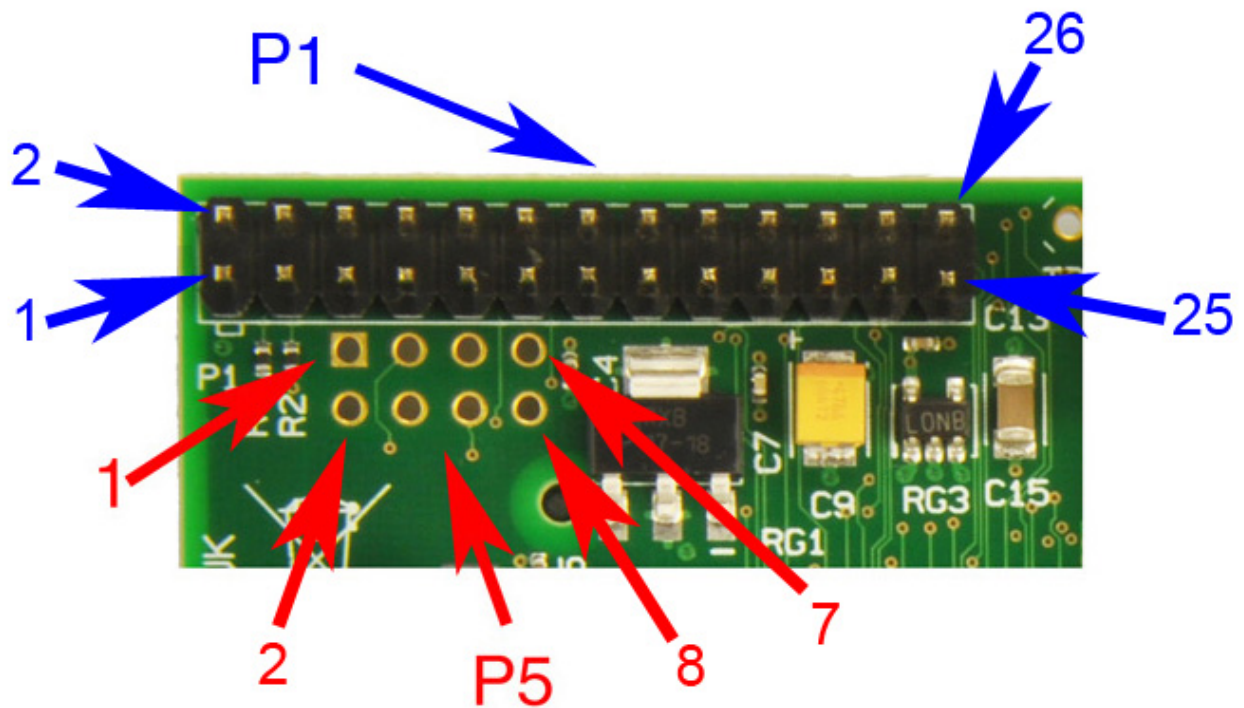
Connector P1 sorted by connector pin number B+

Raspy pin	GPIO	Pull	Alt0	Alt1	Alt2	Alt3	Alt4	Alt5
1	+3,3 V							
2	+5 V							
3	GPIO2	High	SDA1	SA3	<reserved>			
4	+5 V							
5	GPIO3	High	SCL1	SA2	<reserved>			
6	GND							
7	GPIO4	High	GPCLK0	SA1	<reserved>			ARM_TDI
8	GPIO14	Low	TXD0	SD6	<reserved>			TXD1
9	GND							
10	GPIO15	Low	RXD0	SD7	<reserved>			RXD1
11	GPIO17	Low	<reserved>	SD9	<reserved>	RTS0	SPI1_CE1_N	RTS1
12	GPIO18	Low	PCM_CLK	SD10	<reserved>	BSCSL_SDA / MOSI	SPI1_CE0_N	PWM0
13	GPIO27	Low	<reserved>	<reserved>	<reserved>	SD1_DAT3	ARM_TMS	
14	GND							
15	GPIO22	Low	<reserved>	SD14	<reserved>	SD1_CLK	ARM_TRST	
16	GPIO23	Low	<reserved>	SD15	<reserved>	SD1_CMD	ARM_RTCK	
17	+3,3 V							
18	GPIO24	Low	<reserved>	SD16	<reserved>	SD1_DAT0	ARM_TDO	
19	GPIO10	Low	SPI0_MOSI	SD2	<reserved>			
20	GND							
21	GPIO9	Low	SPI0_MISO	SD1	<reserved>			
22	GPIO25	Low	<reserved>	SD17	<reserved>	SD1_DAT1	ARM_TCK	
23	GPIO11	Low	SPI0_SCLK	SD3	<reserved>			
24	GPIO8	High	SPI0_CE0_N	SD0	<reserved>			
25	GND							
26	GPIO7	High	SPI0_CE1_N	SWE_N / SRW_N	<reserved>			
27	ID_SD							
28	ID_SC							
29	GPIO5	High	GPCLK1	SAC	<reserved>			ARM_TDO
30	GND							
31	GPIO6	High	GPCLK2	SOE_N/SE	<reserved>			ARM_RTCK
32	GPIO12	Low	PWM0	SD4	<reserved>			ARM_TMS
33	GPIO13	Low	PWM1	SD5	<reserved>			ARM_TCK
34	GND							
35	GPIO19	Low	PCM_FS	SD11	<reserved>	BSCSL_SCL / SCLK	SPI1_MISO	PWM1
36	GPIO16	Low	<reserved>	SD8	<reserved>	CTS0	SPI1_CE2_N	CTS1
37	GPIO26	Low	<reserved>	<reserved>	<reserved>	SD1_DAT2	ARM_TDI	
38	GPIO20	Low	PCM_DIN	SD12	<reserved>	BSCSL / MISO	SPI1_MOSI	GPCLK0
39	GND							
40	GPIO21	Low	PCM_DOUT	SD13	<reserved>	BSCSL / CE_N	SPI1_SCLK	GPCLK1

Connector P1 sorted by connector paired pin number B+

Raspy pin	GPIO	Pull	Alt0	Alt1	Alt2	Alt3	Alt4	Alt5
1	+3,3 V							
3	GPIO2	High	SDA1	SA3	<reserved>			
5	GPIO3	High	SCL1	SA2	<reserved>			
7	GPIO4	High	GPCLK0	SA1	<reserved>			ARM_TDI
9	GND							
11	GPIO17	Low	<reserved>	SD9	<reserved>	RTS0	SPI1_CE1_N	RTS1
13	GPIO27	Low	<reserved>	<reserved>	<reserved>	SD1_DAT3	ARM_TMS	
15	GPIO22	Low	<reserved>	SD14	<reserved>	SD1_CLK	ARM_TRST	
17	+3,3 V							
19	GPIO10	Low	SPI0_MOSI	SD2	<reserved>			
21	GPIO9	Low	SPI0_MISO	SD1	<reserved>			
23	GPIO11	Low	SPI0_SCLK	SD3	<reserved>			
25	GND							
27	ID_SD							
29	GPIO5	High	GPCLK1	SAC	<reserved>			ARM_TDO
31	GPIO6	High	GPCLK2	SOE_N/SE	<reserved>			ARM_RTCK
33	GPIO13	Low	PWM1	SD5	<reserved>			ARM_TCK
35	GPIO19	Low	PCM_FS	SD11	<reserved>	BSCSL_SCL / SCLK	SPI1_MISO	PWM1
37	GPIO26	Low	<reserved>	<reserved>	<reserved>	SD1_DAT2	ARM_TDI	
39	GND							
2	+5 V							
4	+5 V							
6	GND							
8	GPIO14	Low	TXD0	SD6	<reserved>			TXD1
10	GPIO15	Low	RXD0	SD7	<reserved>			RXD1
12	GPIO18	Low	PCM_CLK	SD10	<reserved>	BSCSL_SDA / MOSI	SPI1_CE0_N	PWM0
14	GND							
16	GPIO23	Low	<reserved>	SD15	<reserved>	SD1_CMD	ARM_RTCK	
18	GPIO24	Low	<reserved>	SD16	<reserved>	SD1_DAT0	ARM_TDO	
20	GND							
22	GPIO25	Low	<reserved>	SD17	<reserved>	SD1_DAT1	ARM_TCK	
24	GPIO8	High	SPI0_CE0_N	SD0	<reserved>			
26	GPIO7	High	SPI0_CE1_N	SWE_N / SRW_N	<reserved>			
28	ID_SC							
30	GND							
32	GPIO12	Low	PWM0	SD4	<reserved>			ARM_TMS
34	GND							
36	GPIO16	Low	<reserved>	SD8	<reserved>	CTS0	SPI1_CE2_N	CTS1
38	GPIO20	Low	PCM_DIN	SD12	<reserved>	BSCSL / MISO	SPI1_MOSI	GPCLK0
40	GPIO21	Low	PCM_DOUT	SD13	<reserved>	BSCSL / CE_N	SPI1_SCLK	GPCLK1

Rev2



Connector P1 sorted by GPIO pin number Rev2

Raspy pin	GPIO	Pull	Alt0	Alt1	Alt2	Alt3	Alt4	Alt5
3	GPIO2	High	SDA1	SA3	<reserved>			
5	GPIO3	High	SCL1	SA2	<reserved>			
7	GPIO4	High	GPCLK0	SA1	<reserved>			ARM_TDI
26	GPIO7	High	SPI0_CE1_N	SWE_N / SRW_N	<reserved>			
24	GPIO8	High	SPI0_CE0_N	SD0	<reserved>			
21	GPIO9	Low	SPI0_MISO	SD1	<reserved>			
19	GPIO10	Low	SPI0_MOSI	SD2	<reserved>			
23	GPIO11	Low	SPI0_SCLK	SD3	<reserved>			
8	GPIO14	Low	TXD0	SD6	<reserved>			TXD1
10	GPIO15	Low	RXD0	SD7	<reserved>			RXD1
11	GPIO17	Low	<reserved>	SD9	<reserved>	RTS0	SPI1_CE1_N	RTS1
12	GPIO18	Low	PCM_CLK	SD10	<reserved>	BSCSL_SDA / MOSI	SPI1_CE0_N	PWM0
15	GPIO22	Low	<reserved>	SD14	<reserved>	SD1_CLK	ARM_TRST	
16	GPIO23	Low	<reserved>	SD15	<reserved>	SD1_CMD	ARM_RTCK	
18	GPIO24	Low	<reserved>	SD16	<reserved>	SD1_DAT0	ARM_TDO	
22	GPIO25	Low	<reserved>	SD17	<reserved>	SD1_DAT1	ARM_TCK	
13	GPIO27	Low	<reserved>	<reserved>	<reserved>	SD1_DAT3	ARM_TMS	
1	+3,3 V							
17	+3,3 V							
2	+5 V							
4	+5 V							
6	GND							
9	GND							
14	GND							
20	GND							
25	GND							

Connector P1 sorted by connector pin number Rev2

Raspy pin	GPIO	Pull	Alt0	Alt1	Alt2	Alt3	Alt4	Alt5
1	+3,3 V							
2	+5 V							
3	GPIO2	High	SDA1	SA3	<reserved>			
4	+5 V							
5	GPIO3	High	SCL1	SA2	<reserved>			
6	GND							
7	GPIO4	High	GPCLK0	SA1	<reserved>			ARM_TDI
8	GPIO14	Low	TXD0	SD6	<reserved>			TXD1
9	GND							
10	GPIO15	Low	RXD0	SD7	<reserved>			RXD1
11	GPIO17	Low	<reserved>	SD9	<reserved>	RTS0	SPI1_CE1_N	RTS1
12	GPIO18	Low	PCM_CLK	SD10	<reserved>	BSCSL_SDA / MOSI	SPI1_CE0_N	PWM0
13	GPIO27	Low	<reserved>	<reserved>	<reserved>	SD1_DAT3	ARM_TMS	
14	GND							
15	GPIO22	Low	<reserved>	SD14	<reserved>	SD1_CLK	ARM_TRST	
16	GPIO23	Low	<reserved>	SD15	<reserved>	SD1_CMD	ARM_RTCK	
17	+3,3 V							
18	GPIO24	Low	<reserved>	SD16	<reserved>	SD1_DAT0	ARM_TDO	
19	GPIO10	Low	SPI0_MOSI	SD2	<reserved>			
20	GND							
21	GPIO9	Low	SPI0_MISO	SD1	<reserved>			
22	GPIO25	Low	<reserved>	SD17	<reserved>	SD1_DAT1	ARM_TCK	
23	GPIO11	Low	SPI0_SCLK	SD3	<reserved>			
24	GPIO8	High	SPI0_CE0_N	SD0	<reserved>			
25	GND							
26	GPIO7	High	SPI0_CE1_N	SWE_N / SRW_N	<reserved>			

Connector P1 sorted by connector paired pin number Rev2

Raspy pin	GPIO	Pull	Alt0	Alt1	Alt2	Alt3	Alt4	Alt5
1	+3,3 V							
3	GPIO2	High	SDA1	SA3	<reserved>			
5	GPIO3	High	SCL1	SA2	<reserved>			
7	GPIO4	High	GPCLK0	SA1	<reserved>			ARM_TDI
9	GND							
11	GPIO17	Low	<reserved>	SD9	<reserved>	RTS0	SPI1_CE1_N	RTS1
13	GPIO27	Low	<reserved>	<reserved>	<reserved>	SD1_DAT3	ARM_TMS	
15	GPIO22	Low	<reserved>	SD14	<reserved>	SD1_CLK	ARM_TRST	
17	+3,3 V							
19	GPIO10	Low	SPI0_MOSI	SD2	<reserved>			
21	GPIO9	Low	SPI0_MISO	SD1	<reserved>			
23	GPIO11	Low	SPI0_SCLK	SD3	<reserved>			
25	GND							
2	+5 V							
4	+5 V							
6	GND							
8	GPIO14	Low	TXD0	SD6	<reserved>			TXD1
10	GPIO15	Low	RXD0	SD7	<reserved>			RXD1
12	GPIO18	Low	PCM_CLK	SD10	<reserved>	BSCSL_SDA / MOSI	SPI1_CE0_N	PWM0
14	GND							
16	GPIO23	Low	<reserved>	SD15	<reserved>	SD1_CMD	ARM_RTCK	
18	GPIO24	Low	<reserved>	SD16	<reserved>	SD1_DAT0	ARM_TDO	
20	GND							
22	GPIO25	Low	<reserved>	SD17	<reserved>	SD1_DAT1	ARM_TCK	
24	GPIO8	High	SPI0_CE0_N	SD0	<reserved>			
26	GPIO7	High	SPI0_CE1_N	SWE_N / SRW_N	<reserved>			

Connector P5 sorted by GPIO pin number Rev2

Raspy pin	GPIO	Pull	Alt0	Alt1	Alt2	Alt3	Alt4	Alt5
3	GPIO28	-	SDA0	SA5	PCM_CLK	<reserved>		
4	GPIO29	-	SCL0	SA4	PCM_FS	<reserved>		
5	GPIO30	Low	<reserved>	SA3	PCM_DIN	CTS0		CTS1
6	GPIO31	Low	<reserved>	SA2	PCM_DOUT	RTS0		RTS1
2	+3,3 V							
1	+5 V							
7	GND							
8	GND							

Connector P5 sorted by connector pin number Rev2

Raspy pin	GPIO	Pull	Alt0	Alt1	Alt2	Alt3	Alt4	Alt5
1	+5 V							
2	+3,3 V							
3	GPIO28	-	SDA0	SA5	PCM_CLK	<reserved>		
4	GPIO29	-	SCL0	SA4	PCM_FS	<reserved>		
5	GPIO30	Low	<reserved>	SA3	PCM_DIN	CTS0		CTS1
6	GPIO31	Low	<reserved>	SA2	PCM_DOUT	RTS0		RTS1
7	GND							
8	GND							

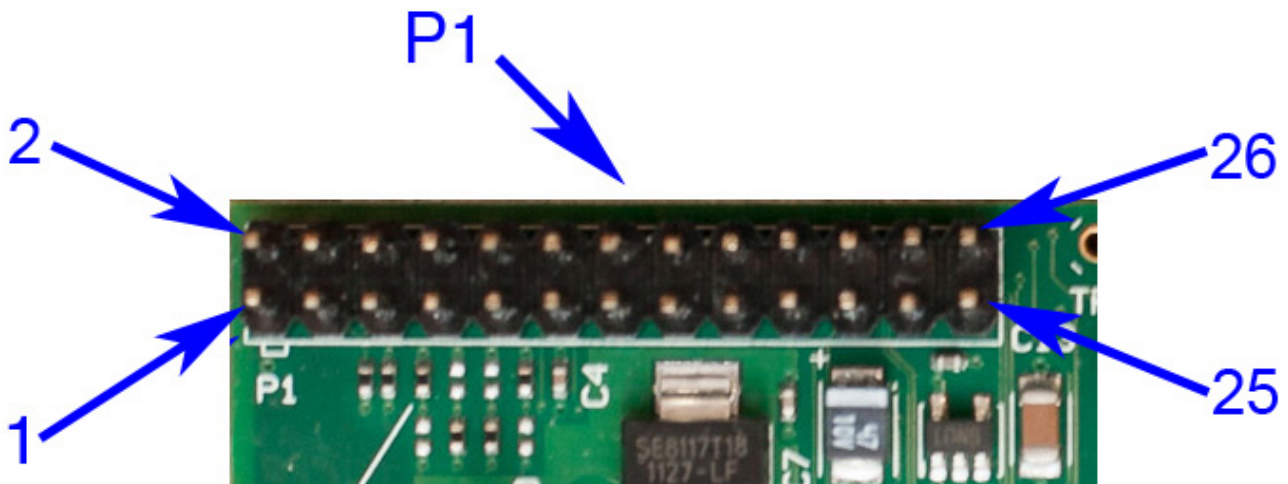
Connector P5 sorted by connector paired pin number Rev2

Raspy pin	GPIO	Pull	Alt0	Alt1	Alt2	Alt3	Alt4	Alt5
1	+5 V							
3	GPIO28	-	SDA0	SA5	PCM_CLK	<reserved>		
5	GPIO30	Low	<reserved>	SA3	PCM_DIN	CTS0		CTS1
7	GND							
2	+3,3 V							
4	GPIO29	-	SCL0	SA4	PCM_FS	<reserved>		
6	GPIO31	Low	<reserved>	SA2	PCM_DOUT	RTS0		RTS1
8	GND							

Board led

Raspy pin	GPIO	Pull	Alt0	Alt1	Alt2	Alt3	Alt4	Alt5
Led	GPIO16	Low	<reserved>	SD8	<reserved>	CTS0	SPI1_CE2_N	CTS1

Rev1



Connector P1 sorted by GPIO pin number Rev1

Raspy pin	GPIO	Pull	Alt0	Alt1	Alt2	Alt3	Alt4	Alt5
3	GPIO0	High	SDA0	SA5	<reserved>			
5	GPIO1	High	SCL0	SA4	<reserved>			
7	GPIO4	High	GPCLK0	SA1	<reserved>			ARM_TDI
26	GPIO7	High	SPI0_CE1_N	SWE_N / SRW_N	<reserved>			
24	GPIO8	High	SPI0_CE0_N	SD0	<reserved>			
21	GPIO9	Low	SPI0_MISO	SD1	<reserved>			
19	GPIO10	Low	SPI0_MOSI	SD2	<reserved>			
23	GPIO11	Low	SPI0_SCLK	SD3	<reserved>			
8	GPIO14	Low	TXD0	SD6	<reserved>			TXD1
10	GPIO15	Low	RXD0	SD7	<reserved>			RXD1
11	GPIO17	Low	<reserved>	SD9	<reserved>	RTS0	SPI1_CE1_N	RTS1
12	GPIO18	Low	PCM_CLK	SD10	<reserved>	BSCSL SDA / MOSI	SPI1_CE0_N	PWM0
13	GPIO21	Low	PCM_DOUT	SD13	<reserved>	BSCSL / CF_N	SPI1_SCLK	GPCLK1
15	GPIO22	Low	<reserved>	SD14	<reserved>	SD1_CLK	ARM_TRST	
16	GPIO23	Low	<reserved>	SD15	<reserved>	SD1_CMD	ARM_RTCK	
18	GPIO24	Low	<reserved>	SD16	<reserved>	SD1_DAT0	ARM_TDO	
22	GPIO25	Low	<reserved>	SD17	<reserved>	SD1_DAT1	ARM_TCK	
1	+3,3 V							
2	+5 V							
6	GND							
4	DNC							
9	DNC							
14	DNC							
17	DNC							
20	DNC							
25	DNC							

Connector P1 sorted by connector pin number Rev1

Raspy pin	GPIO	Pull	Alt0	Alt1	Alt2	Alt3	Alt4	Alt5
1	+3,3 V							
2	+5 V							
3	GPIO0	High	SDA0	SA5	<reserved>			
4	DNC							
5	GPIO1	High	SCL0	SA4	<reserved>			
6	GND							
7	GPIO4	High	GPCLK0	SA1	<reserved>			ARM_TDI
8	GPIO14	Low	TXD0	SD6	<reserved>			TXD1
9	DNC							
10	GPIO15	Low	RXD0	SD7	<reserved>			RXD1
11	GPIO17	Low	<reserved>	SD9	<reserved>	RTS0	SPI1_CE1_N	RTS1
12	GPIO18	Low	PCM_CLK	SD10	<reserved>	BSCSL_SDA / MOSI	SPI1_CE0_N	PWM0
13	GPIO21	Low	PCM_DOUT	SD13	<reserved>	BSCSL / CF_N	SPI1_SCLK	GPCLK1
14	DNC							
15	GPIO22	Low	<reserved>	SD14	<reserved>	SD1_CLK	ARM_TRST	
16	GPIO23	Low	<reserved>	SD15	<reserved>	SD1_CMD	ARM_RTCK	
17	DNC							
18	GPIO24	Low	<reserved>	SD16	<reserved>	SD1_DAT0	ARM_TDO	
19	GPIO10	Low	SPI0_MOSI	SD2	<reserved>			
20	DNC							
21	GPIO9	Low	SPI0_MISO	SD1	<reserved>			
22	GPIO25	Low	<reserved>	SD17	<reserved>	SD1_DAT1	ARM_TCK	
23	GPIO11	Low	SPI0_SCLK	SD3	<reserved>			
24	GPIO8	High	SPI0_CE0_N	SD0	<reserved>			
25	DNC							
26	GPIO7	High	SPI0_CE1_N	SWE_N / SRW_N	<reserved>			

Connector P1 sorted by connector paired pin number Rev1

Raspy pin	GPIO	Pull	Alt0	Alt1	Alt2	Alt3	Alt4	Alt5
1	+3,3 V							
3	GPIO0	High	SDA0	SA5	<reserved>			
5	GPIO1	High	SCL0	SA4	<reserved>			
7	GPIO4	High	GPCLK0	SA1	<reserved>			ARM_TDI
9	DNC							
11	GPIO17	Low	<reserved>	SD9	<reserved>	RTS0	SPI1_CE1_N	RTS1
13	GPIO21	Low	PCM_DOUT	SD13	<reserved>	BSCSL / CF_N	SPI1_SCLK	GPCLK1
15	GPIO22	Low	<reserved>	SD14	<reserved>	SD1_CLK	ARM_TRST	
17	DNC							
19	GPIO10	Low	SPI0_MOSI	SD2	<reserved>			
21	GPIO9	Low	SPI0_MISO	SD1	<reserved>			
23	GPIO11	Low	SPI0_SCLK	SD3	<reserved>			
25	DNC							
2	+5 V							
4	DNC							
6	GND							
8	GPIO14	Low	TXD0	SD6	<reserved>			TXD1
10	GPIO15	Low	RXD0	SD7	<reserved>			RXD1
12	GPIO18	Low	PCM_CLK	SD10	<reserved>	BSCSL_SDA / MOSI	SPI1_CE0_N	PWM0
14	DNC							
16	GPIO23	Low	<reserved>	SD15	<reserved>	SD1_CMD	ARM_RTCK	
18	GPIO24	Low	<reserved>	SD16	<reserved>	SD1_DAT0	ARM_TDO	
20	DNC							
22	GPIO25	Low	<reserved>	SD17	<reserved>	SD1_DAT1	ARM_TCK	
24	GPIO8	High	SPI0_CE0_N	SD0	<reserved>			
26	GPIO7	High	SPI0_CE1_N	SWE_N / SRW_N	<reserved>			

Board led

Raspy pin	GPIO	Pull	Alt0	Alt1	Alt2	Alt3	Alt4	Alt5
Led	GPIO16	Low	<reserved>	SD8	<reserved>	CTS0	SPI1_CE2_N	CTS1

Webography:

http://elinux.org/RPi_Low-level_peripherals
[BCM2835 ARM Peripherals](#)

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