

ArmStoneA8 GPIO Reference Card (V1.2)

Board Rev 1.20, Feature Connector

Pin	Function	Device	GPIO	/sys/class/gpio/gpio#
1	VCC3.3			
2	VCC5			
3	COL0	Keypad	GPH2_0/XEINT16	146
4	COL1	Keypad	GPH2_1/XEINT17	147
5	COL2	Keypad	GPH2_2/XEINT18	148
6	COL3	Keypad	GPH2_3/XEINT19	149
7	COL4	Keypad	GPH2_4/XEINT20	150
8	COL5	Keypad	GPH2_5/XEINT21	151
9	COL6	Keypad	GPH2_6/XEINT22	152
10	COL7	Keypad	GPH2_7/XEINT23	153
11	GND			
12	SPI_CLK	SPI or INT	GPB0 + GPH1_0/XEINT8	14 + 137*
13	TXD1	UART	GPA0_4	4
14	/SPI_CS	SPI or INT	GPB1 + GPH1_6/XEINT14	15 + 143*
15	RXD1	UART	GPA0_5	5
16	SPI_MOSI or I2CCLK	SPI or I2C	GPB3 + GPD1_1	17 + 41*
17	SPI_MISO or I2CDAT	SPI or I2C	GPB2 + GPD1_0	16 + 40*
18	ROW0	Keypad	GPH3_0/XEINT24	155
19	ROW1	Keypad	GPH3_1/XEINT25	156
20	ROW2	Keypad	GPH3_2/XEINT26	157
21	ROW3	Keypad	GPH3_3/XEINT27	158
22	ROW4	Keypad	GPH3_4/XEINT28	159
23	ROW5	Keypad	GPH3_5/XEINT29	160
24	ROW6	Keypad	GPH3_6/XEINT30	161
25	ROW7	Keypad	GPH3_7/XEINT31	162
26			GPH1_7/XEINT15	144
27	GND			
28	PWMOUT0	PWM	GPD0_1	36
29	ADC_IN0	ADC		
30	PWMOUT1	PWM	GPD0_2	37
31	ADC_IN1	ADC		
32	PWMOUT2	PWM	GPD0_3	38
33	ADC_IN2	ADC		

Pin	Function	Device	GPIO	/sys/class/gpio/gpio#
34	VCFL_ON	Backlight	GPH0_5/XEINT5	133
35	ADC_IN3	ADC		
36	RXD2	UART	GPA1_0	9
37	GND			
38	TXD2	UART	GPA1_1	10
39	VCC3.3			
40	VCC5			
41	MICIN	Audio		
42	GND	Audio		
43	n.c.	Audio		
44	LINEIN_R	Audio		
45	LINEOUT_R	Audio		
46	GND	Audio		
47	GND	Audio		
48	LINEIN_L	Audio		
49	LINEOUT_L	Audio		
50	GND	Audio		
51	/RESET			
52	VCC3.3			
53	n.c.	UART		
54	n.c.	UART		
55	RXD0	UART	GPA0_0	0
56	RTS0	UART	GPA0_3	3
57	TXD0	UART	GPA0_1	1
58	CTS0	UART	GPA0_2	2
59	n.c.	UART		
60	n.c.	UART		
61	GND	UART		
62	VCC5	UART		
63	CANRX/CANL	CAN		
64	CANTX/CANH	CAN		
65	BOOTSEL			
66	VCC3.3			

* You must not configure both GPIOs as output or combine a function and output

ArmStoneA8 GPIO Reference Card (V1.2)

Board Rev. 1.10, Feature Connector

Pin	Function	Device	GPIO	/sys/class/gpio/gpio#
1			GPH1_7/XEINT15	144
2	COL7	Keypad	GPH2_7/XEINT23	153
3	COL6	Keypad	GPH2_6/XEINT22	152
4	COL5	Keypad	GPH2_5/XEINT21	151
5	COL4	Keypad	GPH2_4/XEINT20	150
6	COL3	Keypad	GPH2_3/XEINT19	149
7	COL2	Keypad	GPH2_2/XEINT18	148
8	COL1	Keypad	GPH2_1/XEINT17	147
9	COL0	Keypad	GPH2_0/XEINT16	146
10	SPI_MISO or I2CDAT	SPI or I2C	GPB2 + GPD1_0	16 + 40*
11	SPI_MOSI or I2CCLK	SPI or I2C	GPB3 + GPD1_1	17 + 41*
12	RXD1	UART	GPA0_5	5
13	/SPI_CS	SPI	GPB1 + GPH1_6/XEINT14	15 + 143*
14	TXD1	UART	GPA0_4	4
15	SPI_CLK	SPI	GPB0 + GPH1_0/XEINT8	14 + 137*
16	GND			
17	ROW7	Keypad	GPH3_7/XEINT31	162
18	ROW6	Keypad	GPH3_6/XEINT30	161
19	ROW5	Keypad	GPH3_5/XEINT29	160
20	ROW4	Keypad	GPH3_4/XEINT28	159
21	ROW3	Keypad	GPH3_3/XEINT27	158
22	ROW2	Keypad	GPH3_2/XEINT26	157
23	ROW1	Keypad	GPH3_1/XEINT25	156
24	ROW0	Keypad	GPH3_0/XEINT24	155
25	VCC5			
26	VCC3.3			
27	GND			
28	PWMOUT0	PWM	GPD0_1	36
29	ADC_IN0	ADC		
30	PWMOUT1	PWM	GPD0_2	37
31	ADC_IN1	ADC		
32	PWMOUT2	PWM	GPD0_3	38
33	ADC_IN2	ADC		

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36	RXD2	UART	GPA1_0	9
37	GND			
38	TXD2	UART	GPA1_1	10
39	VCC5			
40	n.c.			
41	MICIN	Audio		
42	GND	Audio		
43	n.c.	Audio		
44	LINEIN_R	Audio		
45	LINEOUT_R	Audio		
46	GND	Audio		
47	GND	Audio		
48	LINEIN_L	Audio		
49	LINEOUT_L	Audio		
50	GND	Audio		
51	GND			
52	VCC5			
53	GND	UART		
54	VCC5	UART		
55	n.c.	UART		
56	n.c.	UART		
57	TXD0	UART	GPA0_1	1
58	CTS0	UART	GPA0_2	2
59	RXD0	UART	GPA0_0	0
60	RTS0	UART	GPA0_3	3
61	n.c.	UART		
62	n.c.	UART		
63	CANRX/CANL	CAN		
64	CANTX/CANH	CAN		
65	BOOTSEL			
66	VCC3.3			

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Connector for Capacitive Touch Module

Pin	Function	Device	GPIO	/sys/class/gpio/gpio#
1	VCC3.3			
2	I2CDAT	I2C	GPD1_4	44
3	I2CCLK	I2C	GPD1_5	45
4	I2C_RST		GPC1_0	29
5	I2C_IRQ		GPH0_1/XEINT1	129
6	GND			

Connector for 4-Wire Resistive Touch

Pin	Function	Device	GPIO	/sys/class/gpio/gpio#
1	XP	ADC		
2	YP	ADC		
3	XM	ADC		
4	YM	ADC		