

PicoCOMA7 GPIO Reference Card V1.3 12.05.2023

Pin layout for Board Rev. 1.1

J1	Function	Device	GPIO	Mode	/sys/class/gpio/gpio#	PCOM-SINTF2
1	ETH_A_TX-	ETH	-	-	-	(J2_1/2)
2	ETH_A_RX-	ETH	-	-	-	(J2_3/6)
3	ETH_A_TX+	ETH	-	-	-	(J2_1/2)
4	ETH_A_RX+	ETH	-	-	-	(J2_3/6)
5	V33					
6	V33					
7	GND					
8	GND					
9	VBAT					
10	/RESET	BOOT	-	-	-	(S1)
11	UART_A_CTS	UART	GPIO1_IO18	IO	18	J10_1
12	SD_A_CD	SDMMC	GPIO1_IO19	IO	19	J10_2
13	UART_B_TXD	UART	GPIO1_IO20	IO	20	(J6_5)
14	UART_B_RXD	UART	GPIO1_IO21	IO	21	(J6_3)
15	UART_B_RTS UART_C_TXD	UART	GPIO1_IO24	IO	24	(J6_4)
16	UART_B_CTS UART_C_RXD	UART	GPIO1_IO25	IO	25	(J6_6)
17	UART_A_TXD	UART	GPIO1_IO30	IO	30	(J7_5)
18	UART_A_RXD	UART	GPIO1_IO31	IO	31	(J7_3)
19	USBH_A_DP	USB HOST	-	-	-	J4_3
20	USBH_A_DN	USB HOST	-	-	-	J4_2
21	USB_OTG_DP	USB OTG	-	-	-	J3_3
22	USB_OTG_DM	USB OTG	-	-	-	J3_2
23	USB_OTG_VBUS	USB OTG	-	-	-	J3_1
24	USBH_A_PWR	USB HOST	GPIO1_IO28	IO	28	(J4_1)
25	GND					
26	SPI_A_MISO	SPI	GPIO4_IO24	IO	120	J10_3
27	SPI_A_MOSI	SPI	GPIO4_IO23	IO	119	J10_4
28	SPI_A_SCLK	SPI	GPIO4_IO21	IO	117	J10_5
29	SPI_A_SS0	SPI	GPIO1_IO29	IO	29	J10_6
30	CAN_A_TX I2C_B_SDA	CAN / I2C	GPIO1_IO26	IO	26	(J10_25/26)
31	CAN_A_RX I2C_B_SCL	CAN / I2C	GPIO1_IO27	IO	27	(J10_25/26)
32	I2C_A_SDA CAN_B_TX	I2C / CAN	GPIO1_IO22	IO	22	J10_9
33	I2C_A_SCL CAN_B_RX	I2C / CAN	GPIO1_IO23	IO	23	J10_10
34	SD_A_DAT0	SDMMC	GPIO2_IO18	IO	50	J5_7
35	SD_A_DAT1	SDMMC	GPIO2_IO19	IO	51	J5_8
36	SD_A_DAT2	SDMMC	GPIO2_IO20	IO	52	J5_9
37	SD_A_DAT3	SDMMC	GPIO2_IO21	IO	53	J5_1
38	SD_A_CLK	SDMMC	GPIO2_IO17	IO	49	J5_5
39	SD_A_CMD	SDMMC	GPIO2_IO16	IO	48	J5_2
40	GPIO1	GPIO	GPIO1_IO09	IO	9	J10_11

J1	Function	Device	GPIO	Mode	/sys/class/gpio/gpio#	PCOM-SINTF2
41	PWM ETH_B_LED	PWM ETH	GPIO1_IO05 -	IO -	5 -	J10_12
42	GND					
43	LCD_R1	LCD	GPIO3_IO06	IO	70	(J9_2)
44	LCD_R2	LCD	GPIO3_IO07	IO	71	(J9_31)
45	LCD_R3	LCD	GPIO3_IO08	IO	72	(J9_32)
46	LCD_R4	LCD	GPIO3_IO09	IO	73	(J9_33)
47	LCD_R5	LCD	GPIO3_IO10	IO	74	(J9_3/34)
48	LCD_G0	LCD	GPIO3_IO11	IO	75	(J9_27)
49	LCD_G1	LCD	GPIO3_IO12	IO	76	(J9_13)
50	LCD_G2	LCD	GPIO3_IO13	IO	77	(J9_7)
51	LCD_G3	LCD	GPIO3_IO14	IO	78	J10_15/(J9_6)
52	LCD_G4	LCD	GPIO3_IO15	IO	79	J10_16/(J9_5)
53	LCD_G5	LCD	GPIO3_IO16	IO	80	J10_7/(J9_4/14)
54	LCD_B1	LCD	GPIO3_IO18	IO	82	J10_8/(J9_11)
55	LCD_B2	LCD	GPIO3_IO19	IO	83	J10_14/(J9_10)
56	LCD_B3	LCD	GPIO3_IO20	IO	84	J10_20/(J9_9)
57	LCD_B4	LCD	GPIO3_IO21	IO	85	J10_21/(J9_16)
58	LCD_B5	LCD	GPIO3_IO22	IO	86	J10_22/(J9_12/15)
59	LCD_CLK	LCD	GPIO3_IO00	IO	64	(J9_19)
60	LCD_DE	LCD	GPIO3_IO01	IO	65	(J9_21)
61	GND					
62	GND					
63	LCD_HSYNC LCD_B0	LCD	GPIO3_IO02 GPIO3_IO17	IO	66 81	(J9_22)
64	LCD_VSYNC LCD_R0	LCD	GPIO3_IO03 GPIO3_IO05	IO	67 69	(J9_20)
65	BL_CTRL	LCD	GPIO3_IO23	IO	87	(J9_20)
66	VLCD_ON	LCD	GPIO3_IO25	IO	89	(J9_18)
67	VCFL_ON	LCD	GPIO3_IO26	IO	90	(J9_25)
68	LCD_DEN	LCD	GPIO3_IO24	IO	88	(J9_23)
69	UART_A_RTS	UART	GPIO1_IO08	IO	8	J10_13/(J7_7/8)
70	ETH_A_LED	ETH	-	-	-	LED1
71	TOUCH_X+	TOUCH	GPIO1_IO04	IO	4	J8_7
72	GND					
73	GND					
74	TOUCH_X-	TOUCH	GPIO1_IO03	IO	3	J8_9
75	TOUCH_Y+	TOUCH	GPIO1_IO02	IO	2	J8_8
76	TOUCH_Y-	TOUCH	GPIO1_IO01	IO	1	J8_10
77	AUDIO_LOUT ETH_B_TX-	AUDIO ETH	-	-	-	J8_1
78	AUDIO_ROUT ETH_B_RX	AUDIO ETH	-	-	-	J8_2
79	AUDIO_LIN ETH_B_TX+	AUDIO ETH	-	-	-	J8_3
80	AUDIO_RIN ETH_B_RX+	AUDIO ETH	-	-	-	J8_4

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Pin layout for Board Rev. 1.0

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1	ETH_A_TX-	ETH	-	-	-	(J2_1/2)
2	ETH_A_RX-	ETH	-	-	-	(J2_3/6)
3	ETH_A_TX+	ETH	-	-	-	(J2_1/2)
4	ETH_A_RX+	ETH	-	-	-	(J2_3/6)
5	V33					
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7	GND					
8	GND					
9	VBAT					
10	/RESET	BOOT	-	-	-	(S1)
11	UART_A_CTS	UART	GPIO1_IO18	IO	18	J10_1
12	SD_A_CD	SDMMC	GPIO1_IO19	IO	19	J10_2
13	UART_B_TXD	UART	GPIO1_IO20	IO	20	(J6_5)
14	UART_B_RXD	UART	GPIO1_IO21	IO	21	(J6_3)
15	UART_B_RTS UART_C_TXD	UART	GPIO1_IO24	IO	24	(J6_4)
16	UART_B_CTS UART_C_RXD	UART	GPIO1_IO25	IO	25	(J6_6)
17	UART_A_TXD	UART	GPIO1_IO30	IO	30	(J7_5)
18	UART_A_RXD	UART	GPIO1_IO31	IO	31	(J7_3)
19	USBH_A_DP	USB HOST	-	-	-	J4_3
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30	CAN_A_TX I2C_B_SDA	CAN / I2C	GPIO1_IO26	IO	26	(J10_25/26)
31	CAN_A_RX I2C_B_SCL	CAN / I2C	GPIO1_IO27	IO	27	(J10_25/26)
32	I2C_A_SDA CAN_B_TX	I2C / CAN	GPIO1_IO22	IO	22	J10_9
33	I2C_A_SCL CAN_B_RX	I2C / CAN	GPIO1_IO23	IO	23	J10_10
34	SD_A_DAT0	SDMMC	GPIO2_IO18	IO	50	J5_7
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40	GPIO1	GPIO	GPIO1_IO08	IO	8	J10_11

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77	AUDIO_LOUT ETH_B_TX-	AUDIO ETH	-	-	-	J8_1
78	AUDIO_ROUT ETH_B_RX	AUDIO ETH	-	-	-	J8_2
79	AUDIO_LIN ETH_B_TX+	AUDIO ETH	-	-	-	J8_3
80	AUDIO_RIN ETH_B_RX+	AUDIO ETH	-	-	-	J8_4