

Date:		cCARD Pinout:			F28P65X			HSEC Pinout:
07Jun2023								2.17
HSEC pin	MCU pin	MCU Usage for Std	HSEC cCARD standard	HSEC cCARD standard	MCU Usage for Std	MCU pin	HSEC pin	
1	-		JTAG-EMU1	JTAG-EMU0		-	2	
3	TMS	TMS	JTAG-TMS	JTAG-TRSTn		-	4	
5	TCK	TCK	JTAG-TCK	JTAG-TDO	TDO	GPIO223/TDO	6	
7			GND	JTAG-TDI	TDI	GPIO222/TDI	8	
9	A0, DACA_OUT, CMP1P	Analog/DACA	ADC1 (and/or DACA)	GND			10	
11	A1, CMP1N	Analog	ADC1 (and/or DACB)	ADC2	Analog	B0, VDAC	12	
13			GND	ADC2	Analog/DACC	B1, DACC_OUT	14	
15	A2, CMP1P	Analog	ADC1 (and/or CMPIN+)	GND			16	
17	A3, CMP1N	Analog	ADC1	ADC2	Analog	B2, CMP3P	18	
19			GND	ADC2	Analog	B3, CMP3N	20	
21	A4, CMP2P	Analog	ADC1 (and/or CMPIN+)	GND			22	
23	A5, CMP2N	Analog	ADC1	ADC2	Analog	B4, GPIO215, CMP5N	24	
25	A14/B14/C14, CMP4P	Analog	ADC (and/or CMPIN+)	ADC2	Analog	B5, GPIO216, CMP5P	26	
27	A15/B15/C15, CMP4N	Analog	ADC	ADC	Analog	C6, GPIO203, CMP10P	28	
29			GND	ADC	Analog	C4, GPIO205, CMP10N	30	
31	C2, CMP6P	Analog	ADC	Rsv			32	
33	C3, GPIO206, CMP6N	Analog	ADC	ADC	Analog	A8, GPIO211, CMP8P	34	
35			GND	ADC	Analog	A9, GPIO212, CMP8N	36	
37	C10	Analog	ADC	GND			38	
39	C11	Analog	ADC	ADC	Analog	A10, GPIO213	40	
41	-		Rsv	ADC	Analog	A11, GPIO214	42	
43	-		VREFLO	Rsv			44	
45	VREFHIABC *	VREFHI	VREFHI	GND			46	
47			GND	SW0			48	
49	GPIO0	PWM1A	PWM1A	PWM3A	PWM3A	GPIO4	50	
51	GPIO1	PWM1B	PWM1B	PWM3B	PWM3B	GPIO5	52	
53	GPIO2	PWM2A	PWM2A	PWM4A	PWM4A	GPIO6	54	
55	GPIO3	PWM2B	PWM2B	PWM4B	PWM4B	GPIO7	56	
57	GPIO8	PWM5A	PWM5A	PWM7A	PWM7A	GPIO12	58	
59	GPIO9	PWM5B	PWM5B	PWM7B	PWM7B	GPIO13	60	
61	GPIO10	PWM6A	PWM6A	PWM8A	PWM8A	GPIO14	62	
63	GPIO11	PWM6B	PWM6B or FSIRX-D1	PWM8B	PWM8B	GPIO15	64	
65			GND	Rsv			66	
67	GPIO16	SPIPCOA	SPISIMO	QEPA or McBSP-MDX	QEP1-A	GPIO20	68	
69	GPIO17	SPIPCOIA	SPISOMI	QEPB or McBSP-MDR	QEP1-B	GPIO21	70	
71	GPIO18	SPICLKA	SPICLK	QEPA or McBSP-MCLXX	QEP1-S	GPIO22	72	
73	GPIO35	SPIPTEA	SPISTE	QEPI or McBSP-MFSX	QEP1-I	GPIO23	74	
75	GPIO24	SPIPCOB	eCAP or SPISIMO	SCIRX/UARTX	SCI-RXA	GPIO28##	76	
77	GPIO25	SPIPCOIB	eCAP or SPISOMI or FSITX-D1	SCITX/UARTX or ERRORSTS	SCI-TXA	GPIO29##	78	
79	GPIO26	SPICLKB	eCAP or SPICLK or FSITX-D0	CANRX	CAN-RXA	GPIO30	80	
81	GPIO27	SPIPTEB	eCAP or SPISTE or FSITX-CLK	CANTX	CAN-TXA	GPIO31**	82	
83			GND	SW0			84	
85	GPIO32	I2CSDA-A	I2CSDA	GPIO	GPIO	GPIO34**	86	
87	GPIO33	I2CSCL-A	I2CSCL	GPIO	GPIO	GPIO39	88	
89	GPIO40	GPIO	GPIO	GPIO	GPIO	GPIO125	90	
91	GPIO41	GPIO	GPIO	GPIO	GPIO	GPIO45	92	
93	GPIO96	GPIO	GPIO	GPIO	GPIO	GPIO97	94	
95	GPIO98	GPIO	GPIO	GPIO	GPIO	GPIO99	96	
97			GND	SW0			98	
99	GPIO48	SD-D1	SD-D	QEPA	QEP2-A	GPIO54	100	
101	GPIO49	SD-C1	SD-C	QEPB	QEP2-B	GPIO55	102	
103	GPIO50	SD-D2	SD-D	QEPA	QEP2-S	GPIO56	104	
105	GPIO51	SD-C2	SD-C	QEPA	QEP2-I	GPIO57	106	
107	GPIO52	SD-D3	SD-D	GPIO or McBSP-MCLKR		GPIO105	108	
109	GPIO53	SD-C3	SD-C	GPIO or McBSP-MFSR		GPIO106	110	
111			GND	SW0			112	
113			Rsv	Rsv			114	
115			Rsv	Rsv			116	
117			Rsv	VDD		VDD	118	
119	VDDIO	VDDIO	VDDIO	Device Reset (Active low)	XRSn	XRSn	120	
121	GPIO104	GPIO	GPIO	GPIO	GPIO	GPIO36	122	
123	GPIO37	GPIO	GPIO	GPIO	GPIO	GPIO38	124	
125	GPIO60	GPIO	GPIO	GPIO	GPIO	GPIO61	126	
127	GPIO62	GPIO	GPIO	GPIO	GPIO	GPIO78	128	
129	GPIO109	GPIO	GPIO	GPIO	GPIO	GPIO65	130	
131	GPIO66	GPIO	GPIO	GPIO	GPIO	GPIO67	132	
133	GPIO68	GPIO	GPIO	GPIO	GPIO	GPIO110	134	
135			GND	Rsv			136	
137	GPIO111	GPIO	GPIO	GPIO	GPIO	GPIO112	138	
139	GPIO72#	GPIO	GPIO	GPIO	GPIO	GPIO73	140	
141	GPIO74	GPIO	GPIO	GPIO	GPIO	GPIO126	142	
143	GPIO76	GPIO	GPIO	GPIO	GPIO	GPIO77	144	
145	GPIO108	GPIO	GPIO	GPIO	GPIO	GPIO79	146	
147	GPIO80	GPIO	GPIO	GPIO	GPIO	GPIO81	148	
149	GPIO82	GPIO	GPIO	GPIO	GPIO	GPIO83	150	
151	GPIO84#	GPIO	GPIO	GPIO	GPIO	GPIO85	152	
153	GPIO86	GPIO	GPIO	GPIO	GPIO	GPIO87	154	
155	GPIO88	GPIO	GPIO	GPIO	GPIO	GPIO89	156	
157			GND	SW0			158	
159	GPIO90	GPIO	GPIO	GPIO	GPIO	GPIO91	160	
161	GPIO92	GPIO	GPIO	GPIO	GPIO	GPIO93	162	
163	GPIO94	GPIO	GPIO	GPIO	GPIO	GPIO133	164	
165	GPIO127	GPIO	GPIO	GPIO	GPIO	GPIO128	166	
167	GPIO147	GPIO	GPIO	GPIO	GPIO	GPIO95	168	
169	GPIO115	GPIO	GPIO	GPIO	GPIO	GPIO116	170	
171			Rsv	Rsv			172	
173			Rsv	Rsv			174	
175			Rsv	Rsv			176	
177			Rsv	ERRORSTS	ERRORSTS	GPIO224/ERRORSTS	178	
179			GND	SW0			180	

Analog

Analog

Digital

Digital

*Switches may be altered to connect this HSEC pin to the MCU's VREFHI inputs
 ** Connected to LED
 #Boot mode pin
 ## Connect through isolation to embedded debug probe

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