Date: 07Jun2023

cCARD Pinout: F28P65X

HSEC Pinout: 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	
Analog	9	A0, DACA_OUT, CMP1P	Analog/DACA	ADC1 (and/or DACA)	GND			10	Analog
	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	5V0			48	
Digital	49	GPIO0	PWM1A	PWM1A	PWM3A	PWM3A	GPIO4	50	Digital
	51	GPIO1	PWM1B	PWM1B	PWM3B	PWM3B	GPIO5	52	
	53	GPIO2	PWM2A	PWM2A	PWMA	PWM4A	GPIO6	54	
	55	GPIO3	PWM2B	PWM2B	PWMB	PWM4B	GPIO7	56	
	57	GPIO8	PWM5A	PWMA	PWMA or TZ1 or FSIRX-D0	PWM7A	GPIO12	58	
	59	GPIO9	PWM5B	PWMB	PWMB or TZ2 or FSIRX-CLK	PWM7B	GPIO13	60	
	61	GPIO10	PWM6A	PWMA	PWMA or TZ3	PWM8A	GPIO14	62	
	63	GPIO11	PWM6B	PWMB or FSIRX-D1	PWMB or TZ4	PWM8B	GPIO15	64	
	65			GND	Rsv			66	
	67	GPIO16	SPIPICOA	SPISIMO	QEPA or McBSP-MDX	QEP1-A	GPIO20	68	
	69	GPIO17	SPIPOCIA	SPISOMI	QEPB or McBSP-MDR	QEP1-B	GPIO21	70	
	71	GPIO18	SPICLKA	SPICLK	QEPS or McBSP-MCLKX	QEP1-S	GPIO22	72	
	73	GPIO35	SPIPTEA	SPISTE	QEPI or McBSP-MFSX	QEP1-I	GPIO23	74	
	75	GPIO24	SPIPICOB	eCAP or SPISIMO	SCIRX/UARTRX	SCI-RXA	GPIO28##	76	
	77	GPIO25	SPIPOCIB	eCAP or SPISOMI or FSITX-D1	SCITX/UARTTX 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	5V0			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	5V0			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	QEPS	QEP2-S	GPIO56	104	
	105	GPIO51	SD-C2	SD-C	QEPI	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	5V0			112	
	113			Rsv	Rsv			114	
	115			Rsv	Rsv			116	
	117			Rsv	VDD		VDD	118	
	119	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	5V0			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	5V0			180	

*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