Date:			cCARD Pinout:			F28004x-120-100			HSEC Pinout:
20Jan2017									2.13
	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	GPIO37,TDO #	6
	7			GND		JTAG-TDI	TDI	GPIO35,TDI #	8
	9	A0, B15, C15, DACA	Analog, DACA	ADC1 (and/or DACA)		GND		PGA7NEG	10
	11	A1, DACB	Analog, DACB	ADC1 (and/or DACB)		ADC2	Analog	B0	12
	13	PGA1NEG		GND		ADC2	Analog	B1, A10, C10, PGA7_IN *	14
	15	A2, B6, PGA1_IN *	Analog	ADC1 (and/or CMPIN+)		GND		PGA3NEG	16
	17	A3	Analog	ADC1		ADC2	Analog	B2, C6, PGA3_IN *	18
	19	PGA246NEG		GND		ADC2	Analog	B3, VDAC	20
	21	A4, B8, PGA2_IN *	Analog	ADC1 (and/or CMPIN+)		GND		PGA246NEG	22
	23	A5	Analog	ADC1		ADC2	Analog	B4, C8, C3, PGA4_IN *	24
	25	A6, PGA5_IN *	Analog	ADC (and/or CMPIN+)		ADC2	Analog	C0	26
	27	A9	Analog	ADC		ADC	Analog	C1	28
	29	PGA5NEG		GND		ADC	Analog	C2	30
	31	C5, PGA6_IN	Analog	ADC		Rsv			32
	33	A8 *	Analog	ADC		ADC	Analog	C4	34
	35	PGA246NEG		GND		ADC	Analog	C14	36
	37			ADC		GND			38
	39			ADC		ADC			40
	41			Rsv		ADC			42
	43			VREFLO		Rsv			44
	45	All VREFHIs **	VREFHI	VREFHI		GND			46
	47			GND		5V0			48
	49	GPIO-00	PWM1A	PWM1A		PWM3A	PWM3A	GPIO-04	50
	51	GPIO-01	PWM1B	PWM1B		PWM3B	PWM3B	GPIO-05	52
	53	GPIO-02	PWM2A	PWM2A		PWMA	PWM4A	GPIO-06	54
	55	GPIO-03	PWM2B	PWM2B		PWMB	PWM4B	GPIO-07	56
	57	GPIO-12	PWM7A	PWMA		PWMA or TZ1	GPIO | PWM5A	GPIO-37,TDO # @@	58
	59	GPIO-13	PWM7B	PWMB		PWMB or TZ2	GPIO | PWM6A	GPIO-35,TDI # @	60
	61	GPIO-14	PWM8A	PWMA		PWMA or TZ3	GPIO	GPIO-39	62
	63	GPIO-15	PWM8B	PWMB		PWMB or TZ4	GPIO	GPIO-23 [DCDC]	64
	65			GND		Rsv			66
	67	GPIO-16	SPISIMOA	SPISIMO		QEPA or McBSP-MDX	QEP1A	GPIO-40	68
	69	GPIO-17	SPISOMIA	SPISOMI		QEPB or McBSP-MDR	QEP1B	GPIO-57	70
	71	GPIO-09	SPICLKA	SPICLK		QEPS or McBSP-MCLKX	QEP1S	GPIO-22 [DCDC]	72
	73	GPIO-11	SPISTEA	SPISTE		QEPI or McBSP-MFSX	QEP1I	GPIO-31	74
	75	GPIO-24 #	SPISIMOB	eCAP or SPISIMO		SCIRX/UARTRX	SCIRXA	GPIO-28	76
	77	GPIO-25 #	SPISOMIB	eCAP or SPISOMI		SCITX/UARTTX	SCITXA	GPIO-29	78
	79	GPIO-26 #	SPICLKB	eCAP or SPICLK		CANRX	CANRXA	GPIO-30	80
	81	GPIO-27 #	SPISTEB	eCAP or SPISTE		CANTX	CANTXA	GPIO-32	82
	83			GND		5V0			84
	85	GPIO-10 @	I2CSDAA | GPIO	I2CSDA		GPIO	GPIO	GPIO-34	86
	87	GPIO-08 @@	I2CSCLA | GPIO	I2CSCL		GPIO			88
	89	GPIO-18 ##	GPIO	GPIO		GPIO			90
	91			GPIO		GPIO			92
	93			GPIO		GPIO			94
	95			GPIO		GPIO			96
	97			GND		5V0			98
	99	GPIO-58	SD-D4	SD-D		QEPA	QEP2A	GPIO-24 #	100
	101	GPIO-59	SD-C4	SD-C		QEPB	QEP2B	GPIO-25 #	102
	103	GPIO-56	SD-D3	SD-D		QEPS			104
	105	GPIO-33	SD-C3	SD-C		QEPI			106
	107	GPIO-26 #	SD-D2	SD-D		GPIO or McBSP-MCLKR			108
	109	GPIO-27 #	SD-C2	SD-C		GPIO or McBSP-MFSR			110
	111			GND		5V0			112
	113			Rsv		Rsv			114
	115			Rsv		Rsv			116
	117			Rsv		Rsv			118
	119			Rsv		Device Reset (Active low)	XRSn	XRSn	120
	121			GPIO		GPIO			122
	123			GPIO		GPIO			124
	125			GPIO		GPIO			126
	127			GPIO		GPIO			128
	129			GPIO		GPIO			130
	131			GPIO		GPIO			132
	133			GPIO		GPIO			134
	135			GND		Rsv			136
	137			GPIO		GPIO			138
	139			GPIO		GPIO			140
	141			GPIO		GPIO			142
	143			GPIO		GPIO			144
	145			GPIO		GPIO			146
	147			GPIO		GPIO			148
	149			GPIO		GPIO			150
	151			GPIO		GPIO			152
	153			GPIO		GPIO			154
	155			GPIO		GPIO			156
	157			GND		5V0			158
	159			GPIO		GPIO			160
	161			GPIO		GPIO			162
	163			GPIO		GPIO			164
	165			GPIO		GPIO			166
	167			GPIO		GPIO			168
	169			GPIO		GPIO			170
	171			Rsv		Rsv			172
	173			Rsv		Rsv			174
	175			Rsv		Rsv			176
	177			Rsv		Rsv			178
	179			GND		5V0			180

Analog

Digital

Analog

Digital

* This PGA's switch may be put into the off position to use PGA filtering. If done, some ADC channels listed will no longer go to the HSEC connector.

** Resistors may be altered to connect this HSEC pin to the MCU's VREFHI inputs

Signal can be in only one of two slots via switch

Signal goes to the XTAL (X2) by default but can be configured to come to this HSEC pin by soldering/desoldering resistors

@ Signal may be flipped with the other @ via a switch

@@ Signal may be flipped with the other @@ via a switch

[] This signal comes to the HSEC header by default, but could instead be used as the function in brackets