

Date:		HSEC180ADAPEVM Pinout:				F29H85x SOM (rev A)				HSEC Pinout:	
22Oct2024										2.17	
Analog	HSEC pin	MCU pin	MCU Usage for Std	HSEC cCARD standard	HSEC cCARD standard	MCU Usage for Std	MCU pin	HSEC pin	Analog		
	1	-	-	JTAG-EMU1	JTAG-EMU0	-	-	2			
	3	TMS	TMS	JTAG-TMS	JTAG-TRSTn	-	-	4			
	5	TCK	TCK	JTAG-TCK	JTAG-TDO	TDO	GPIO223	6			
	7	GND	-	GND	JTAG-TDI	TDI	GPIO222	8			
	9	A0/DACOUT1/C24/CMP4P/CMP9P	Analog	ADC1 (and/or DACA)	GND	-	GND	10			
	11	A1/C25/CMP7P/CMP4N	Analog	ADC1 (and/or DACB)	ADC2	Analog	B0/VDAC/C26/CMP3P/CMP1P	12			
	13	GND	-	GND	ADC2	Analog	B1/C27/CMP3P/CMP12HN	14			
	15	A6/E24/GPIO224/CMP2P/CMP12N	Analog	ADC1 (and/or CMPIN+)	GND	-	GND	16			
	17	A7/E25/GPIO225/CMP9P/CMP2N	Analog	ADC1	ADC2	Analog	B2/D26/CMP3P/CMP2P	18			
	19	GND	-	GND	ADC2	Analog	B3/D27/CMP1P/CMP3N	20			
	21	A8/GPIO226/CMP5HP/CMP8P	Analog	ADC1 (and/or CMPIN+)	GND	-	GND	22			
	23	A9/GPIO227/CMP6HP	Analog	ADC1	ADC2	Analog	B4/D30/CMP7	24			
	25	C12/CMP12HP	Analog	ADC (and/or CMPIN+)	ADC2	Analog	B5/D31/CMP7P/CMP3N	26			
	27	C16/CMP6LP	Analog	ADC	ADC	Analog	D0/B24/CMP4P/CMP10P	28			
	29	GND	-	GND	ADC	Analog	D1/B25/CMP7P/CMP3P	30			
	31	C17/CMP7LP	Analog	ADC	Rsv	-	-	32			
	33	C0/E28/CMP10P/CMP5P	Analog	ADC	ADC	Analog	D2/B26/CAL0/CMP4P/CMP7N	34			
	35	GND	-	GND	ADC	Analog	D3/B27/CAL1/CMP8P/CMP10P	36			
	37	C1/E29/CMP11P/CMP9P	Analog	ADC	GND	-	GND	38			
39	C2/E30/CMP9P/CMP11N	Analog	ADC	ADC	Analog	D10/CMP8LP	40				
41	-	-	Rsv	ADC	Analog	D11/CMP9LP	42				
43	-	-	VREFLO	Rsv	-	-	44				
45	VREFHIA	VREFHIA	VREFHI	GND	-	GND	46				
47	GND	-	GND	SV0	-	SV0_IN	48				
49	GPIO0	EPWM1_A	PWM1A	PWM3A	EPWM3_A	GPIO4	50				
51	GPIO1	EPWM1_B	PWM1B	PWM3B	EPWM3_B	GPIO5	52				
53	GPIO2	EPWM2_A	PWM2A	PWMA	EPWM4_A	GPIO27	54				
55	GPIO3	EPWM2_B	PWM2B	PWMB	EPWM4_B	GPIO28	56				
Digital	57	GPIO12	EPWM7_A	PWMA	PWMA or TZ1 or FSIRX-D0	EPWM11_A	GPIO20	58			
	59	GPIO13	EPWM7_B	PWMB	PWMB or TZ2 or FSIRX-CLK	EPWM11_B	GPIO21	60			
	61	GPIO100	EPWM9_A	PWMA	PWMA or TZ3	EPWM14_A	GPIO26	62			
	63	GPIO17	EPWM9_B	PWMB or FSIRX-D1	PWMB or TZ4	EPWM14_B	GPIO88	64			
	65	GND	-	GND	Rsv	-	-	66			
	67	GPIO58	SPIA_PICO	SPISIMO	QEPA or McBSP-MDX	OUTPUTXBAR8	C9/GPIO239/CMP7HP/CMP9P	68			
	69	GPIO59	SPIA_POCI	SPISOMI	QEPB or McBSP-MDR	OUTPUTXBAR13	GPIO36	70			
	71	GPIO60	SPIA_CLK	SPICLK	QEPA or McBSP-MCLKX	OUTPUTXBAR2	GPIO37	72			
	73	GPIO61	SPIA_PTE	SPISTE	QEPI or McBSP-MFSX	OUTPUTXBAR1	GPIO34	74			
	75	GPIO91 (4)	SPID_PICO	eCAP or SPISIMO	SCIRX/UARTRX	UARTA_RX	GPIO43	76			
	77	GPIO92 (4)	SPID_POCI	eCAP or SPISOMI or FSITX-D1	SCITX/UARTTX or ERRORSTS	UARTA_TX	GPIO42	78			
	79	GPIO93 (4)	SPID_CLK	eCAP or SPICLK or FSITX-D0	CANRX	MCAND_RX/LINB_RX	GPIO68	80			
	81	GPIO94	SPID_PTE	eCAP or SPISTE or FSITX-CLK	CANTX	MCAND_TX/LINB_TX	GPIO67	82			
	83	GND	-	GND	SV0	-	SV0_IN	84			
	85	GPIO32	I2CA_SDA	I2CSDA	GPIO	GPIO81	GPIO81 (5)	86			
	87	GPIO33	I2CA_SCL	I2CSCL	GPIO	GPIO95	GPIO95	88			
	89	GPIO23 (6)	GPIO23 (LED3)	GPIO	GPIO	PMBUSA_CTL	GPIO15	90			
	91	GPIO9 (6)	GPIO9 (LED4)	GPIO	GPIO	PMBUSA_ALERT	GPIO18	92			
	93	GPIO40 (c)	GPIO40	GPIO	GPIO	PMBUSA_SCL	GPIO10	94			
	95	GPIO41	GPIO41	GPIO	GPIO	PMBUSA_SDA	GPIO22	96			
97	GND	-	GND	SV0	-	SV0_IN	98				
99	E4/A28/GPIO246/CMP8	SD1_D1	SD-D	QEPA	OUTPUTXBAR15	GPIO97	100				
101	C10/CMP8HP/AIO186 (3)	SD1_C1	SD-C	QEPB	OUTPUTXBAR16	GPIO98	102				
103	E13/CMP11P/AIO211 (3)	SD2_D3	SD-D	QEPA	OUTPUTXBAR12	GPIO35	104				
105	E16/CMP6P/AIO212 (3)	SD2_C4	SD-C	QEPI	OUTPUTXBAR3	B8/GPIO232/CMP11HP/CMP4P	106				
107	C8/GPIO238/CMP6HP/CMP12P	SD1_D3	SD-D	GPIO or McBSP-MCLKR	MCANE_RX	GPIO47	108				
109	D6/B30/GPIO242/CMP1HP/CMP1HN	SD1_D4	SD-C	GPIO or McBSP-MFSR	MCANE_TX	GPIO46	110				
111	GND	-	GND	SV0	-	SV0_IN	112				
113	PMIC	PMIC_SAFE_OUT2	Rsv/PMIC_SAFE_OUT	Rsv/PMIC_WAKE	PMIC_WAKE1	PMIC	114				
115	-	-	Rsv	Rsv	-	-	116				
117	SV0_OUT_CAN	-	Rsv/SV0_OUT_CAN	VDD	-	NC	118				
119	3V3_OUT	-	VDDIO	Device Reset (Active low)	XRSn	XRSn	120				
Digital	121	E17/CMP6/AIO213 (3)	SD2_D4	GPIO	GPIO	EPWM18_A	GPIO101	122			
	123	GPIO56	EPWM17_A	GPIO	GPIO	EPWM18_B	GPIO96	124			
	125	GPIO57	EPWM17_B	GPIO	GPIO	-	-	126			
	127	GPIO78	EPWM10_A	GPIO	GPIO	-	-	128			
	129	GPIO19	EPWM10_B	GPIO	GPIO	UARTD_TX	GPIO86	130			
	131	GPIO52	EPWM16_A	GPIO	GPIO	UARTD_RX	GPIO77	132			
	133	GPIO31	EPWM16_B	GPIO	GPIO	EPWM6_A	GPIO14	134			
	135	GND	-	GND	Rsv	-	-	136			
	137	GPIO221	EPWM6_B	GPIO	GPIO	SD2_D2	E11/CMP11P/AIO209 (3)	138			
	139	C6/GPIO236/CMP12LP	EPWM8_A	GPIO	GPIO	SD3_C4	E8/C30/CMP2P/CMP10N/AIO206 (3)	140			
	141	C7/GPIO237/CMP5HP	EPWM8_B	GPIO	GPIO	SD3_D4	E9/C31/CMP2P/CMP9N/AIO207 (3)	142			
	143	-	-	GPIO	GPIO	MCANA_TX	B10/GPIO234/CMP5LP	144			
	145	-	-	GPIO	GPIO	MCANA_RX	B11/GPIO235/CMP6LP	146			
	147	-	-	GPIO	GPIO	-	-	148			
	149	-	-	GPIO	GPIO	GPIO247	E5/A29/GPIO247	150			
	151	E6/A30/GPIO248/CMP5	SD1_C2	GPIO	GPIO	-	-	152			
	153	E7/A31/GPIO249/CMP5P	SD1_D2	GPIO	GPIO	-	-	154			
	155	GPIO48	SD2_C2	GPIO	GPIO	-	-	156			
	157	GND	-	GND	SV0	-	SV0_IN	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	PMIC	PMIC_COMP2_IN+	Rsv/PMIC_COMP2_IN+	Rsv/PMIC_WAKE2	PMIC_WAKE2	PMIC	172				
173	PMIC	PMIC_COMP2_IN-	Rsv/PMIC_COMP2_IN-	Rsv/LPM_WAKE	-	-	174				
175	PMIC	PMIC_COMP1_IN+	Rsv/PMIC_COMP1_IN+	Rsv	-	-	176				
177	PMIC	PMIC_COMP1_IN-	Rsv/PMIC_COMP1_IN-	ERRORSTS/PMIC_SAFE_OUT1	PMIC_SAFE_OUT1	PMIC	178				
179	GND	-	GND	SV0	-	SV0_IN	180				
1. ADC differential pairs are identified using "P" and "N". See device datasheet for details.											
2. CMPSS pins support various connections to the CMPSS high- and low-comparator inputs. See device datasheet for details.											
3. Pin is input only. Output mode is not supported.											
4. Pin connects to PMIC SPI bus.											
5. May be optionally connected to PMIC_SAFE_OUT1 pin through 0-ohm resistor.											
6. Connects to user LED.											