

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			
Analog	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			
Digital	39	C2/E30/CMP9P/CMP11N	Analog	ADC	ADC	Analog	D10/CMP8LP	40			
	41	-	-	Rsv	ADC	Analog	D11/CMP9LP	42			
	43	-	-	VREFLO	Rsv	-	-	44			
	45	VREFHIAB	VREFHIAB	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	EPWM4A	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			
Digital	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			
Digital	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			
Digital	117	SV0_OUT_CAN	-	Rsv/SV0_OUT_CAN	VDD	-	NC	118			
	119	3V3_OUT	-	VDDIO	Device Reset (Active low)	XRSn	XRSn	120			
	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			
Digital	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			
Digital	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			
Digital	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. Ouput 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.										

SoM Pinout: F29H85x SOM (rev A)

MCU SoM Standard Revision: 0.81

Connector J1

MCU Function	MCU Pin	SoM Standard	Pin	Pin	SoM Standard	MCU Pin	MCU Function
EPWM4_B	GPIO28	PWMB	1	2	PWMB	GPIO88	EPWM14_B
EPWM4_A	GPIO27	PWMA	3	4	PWMA	GPIO26	EPWM14_A
EPWM3_B	GPIO5	PWM3B (b,d)	5	6	PWMB	GPIO21	EPWM11_B
EPWM3_A	GPIO4	PWM3A (b,d)	7	8	PWMA	GPIO20	EPWM11_A
EPWM2_B	GPIO3	PWM2B (b,d)	9	10	PWMB	GPIO17	EPWM9_B
EPWM2_A	GPIO2	PWM2A (b,d)	11	12	PWMA	GPIO100	EPWM9_A
EPWM1_B	GPIO1	PWM1B (b,d)	13	14	PWMB	GPIO13	EPWM7_B
EPWM1_A	GPIO0	PWM1A (b,d)	15	16	PWMA	GPIO12	EPWM7_A
-	GND	GND	17	18	SVD_IN (b)	SVD0	-
TDI	GPIO222	JTAG-TDI (a,b)	19	20	SVD_IN (b)	SVD0	-
TDO	GPIO223	JTAG-TDO (a,b)	21	22	JTAG-TCK (a,b)	TCK	TCK
-	EEPROM_I2CSCL	JTAG_I2CSCL (a,b)	23	24	JTAG-TMS (a,b)	TMS	TMS
-	EEPROM_I2CSDA	JTAG_I2CSDA (a,b)	25	26	15W_PD (b,e)	-	-
-	-	LPM_WAKE	27	28	3V3_OUT/SOM_DETECT (a,b)	3V3_OUT	-
XRSn	XRSn	XRSn	29	30	PMIC_WAKE1	PMIC	PMIC_WAKE1
UARTA_TX	GPIO42	UARTTX (a,b)	31	32	ERRORSTS/PMIC_SAFE_OUT1	PMIC	PMIC_SAFE_OUT1
UARTA_RX	GPIO43	UARTRX (a,b)	33	34	SVD_OUT_CAN	SVD0_OUT_CAN	-
MCAND_TX/LINB_TX	GPIO67	CANTX/LINTX	35	36	CANTX	GPIO46	MCANE_TX
MCAND_RX/LINB_RX	GPIO68	CANRX/LINRX	37	38	CANRX	GPIO47	MCANE_RX
SPIA_PTE	GPIO61	SPIPT	39	40	ENCODER4/QEPH	B8/GPIO232/CMP11HP/CMP4P	OUTPUTXBAR3
SPIA_CLK	GPIO60	SPICLK (c)	41	42	ENCODER3/QEP5	GPIO35	OUTPUTXBAR12
SPIA_POCI	GPIO59	SPIPOCI (c)	43	44	ENCODER2/QEPB	GPIO98	OUTPUTXBAR16
SPIA_PICO	GPIO58	SPIPICO (c)	45	46	ENCODER1/QEPA	GPIO97	OUTPUTXBAR15
-	Rsvd	Rsv	47	48	SD2-C	E16/CMP6P/AIO212 (3)	SD2_C4
FSITXA_CLK	GPIO51	FSITX-CLK	49	50	SD2-D	E17/CMP6P/AIO213 (3)	SD2_D4
FSITXA_D1	GPIO50	FSITX-D1	51	52	SD2-D	E13/CMP11P/AIO211 (3)	SD2_D3
FSITXA_D0	GPIO49	FSITX-D0	53	54	SD3-C	C10/CMP8HP/AIO186 (3)	SD1_C1
FSIRXA_CLK	GPIO105	FSIRX-CLK	55	56	SD1-D	D6/B30/GPIO242/CMP1HP/CMP1HN	SD1_D4
FSIRXA_D1	GPIO53	FSIRX-D1	57	58	SD1-D	C8/GPIO238/CMP6HP/CMP12P	SD1_D3
FSIRXA_D0	GPIO103	FSIRX-D0	59	60	SD1-D	E4/A28/GPIO246/CMP8	SD1_D1
J1 GND				J1 GND			
I2CA_SCL	GPIO33	I2CSCL	61	62	SENT/PMBUS_SDA (e)	GPIO22	PMBUS_A_SDA
I2CA_SDA	GPIO32	I2CSDA	63	64	SENT/PMBUS_SCL (e)	GPIO10	PMBUS_A_SCL
OUTPUTXBAR1	GPIO34	ENCODER4/QEPI	65	66	SENT/PMBUS_ALERT (e)	GPIO18	PMBUS_ALERT
OUTPUTXBAR2	GPIO37	ENCODER3/QEP5	67	68	PMBUS_CTL	GPIO15	PMBUS_CTL
OUTPUTXBAR13	GPIO36	ENCODER2/QEPB	69	70	GPIO	GPIO95	GPIO95
OUTPUTXBAR8	C9/GPIO239/CMP7HP/CMP9P	ENCODER1/QEPA	71	72	GPIO	GPIO81 (5)	GPIO81
GPIO9 (LED4)	GPIO9 (6)	GPIO	73	74	GPIO	GPIO41	GPIO41
GPIO23 (LED3)	GPIO23 (6)	GPIO	75	76	GPIO	GPIO40 (c)	GPIO40
-	GND	GND	77	78	GND	GND	-
-	Rsvd	Rsv	79	80	Rsv	-	-
-	Rsvd	Rsv	81	82	Rsv	-	-
VREFHICDE	VREFHICDE	VREFHI2	83	84	Rsv	-	-
VREFHIAB	VREFHIAB	VREFHI1	85	86	Rsv	-	-
-	-	VREFLO	87	88	Rsv	-	-
Analog	E12/CMP10P	ADC	89	90	ADCIN15	A15/B15/C15/D15/E15/CMP4P/CMP12P	Analog
Analog	E10/CMP10P	ADC	91	92	ADCIN14	A14/B14/C14/D14/E14/CMP3P/CMP11P	Analog
Analog	E1/A25/CMP12P/CMP11P	ADC	93	94	ADC	E3/A27/CMP4P	Analog
Analog	E0/DACOUT2/A24/CMP6P/CMP12LP	ADC	95	96	ADC	E2/A26/CMP3P	Analog
Analog	D3/B27/CAL1/CMP8P/CMP10P	ADC4	97	98	ADC4	D11/CMP9LP	Analog
Analog	D2/B26/CAL0/CMP4P/CMP7N	ADC4	99	100	ADC4	D10/CMP8LP	Analog
Analog	C2/E30/CMP9P/CMP11N	ADC3	101	102	ADC4	D1/B25/CMP7P/CMP3P	Analog
Analog	C1/E29/CMP11P/CMP9P	ADC3	103	104	ADC4	D0/B24/CMP4P/CMP10P	Analog
Analog	C16/CMP6LP	ADC3	105	106	ADC3	C0/E28/CMP10P/CMP5P	Analog
Analog	C12/CMP12HP	ADC3	107	108	ADC3	C17/CMP7LP	Analog
Analog	B3/D27/CMP1P/CMP3N	ADC2	109	110	ADC2	B5/D31/CMP7P/CMP3N	Analog
Analog	B2/D26/CMP3P/CMP2P	ADC2	111	112	ADC2	B4/D30/CMP7P	Analog
Analog	A9/GPIO227/CMP6HP	ADC1	113	114	ADC2	B1/C27/CMP3P/CMP12HN	Analog
Analog	A8/GPIO226/CMP5HP/CMP8P	ADC1	115	116	ADC2	B0/VDAC/C26/CMP3P/CMP1P	Analog
Analog	A1/C25/CMP7P/CMP4N	ADC1 (and/or DACB) (b,d)	117	118	ADC1 (b,d)	A7/E25/GPIO225/CMP9P/CMP2N	Analog
Analog	A0/DACOUT1/C24/CMP4P/CMP9P	ADC1 (and/or DACA) (b,d)	119	120	ADC1 (b,d)	A6/E24/GPIO224/CMP2P/CMP12N	Analog

Standard Notes:

- Pin also connects to XDS110ISO-EVM through emulator header.
- Pin also connects to XDS110ISO-EVM through J1.
- Pin also connects to DAC on XDS110ISO-EVM through emulator header.
- Pin also connects to debug header on XDS110ISO-EVM through J1.
- 5V tolerant input pin.

F29H85x SOM (rev A) Notes

- ADC differential pairs are identified using "P" and "N". See device datasheet for details.
- CMP55 pins support various connections to the CMP55 high- and low-comparator inputs. See device datasheet for details.
- Pin is input only. Output mode is not supported.
- Pin connects to PMIC SPI bus.
- May be optionally connected to PMIC SAFE_OUT1 pin through 0-ohm resistor.
- Connects to user LED.

Connector J2

MCU Function	MCU Pin	SoM Standard	Pin	Pin	SoM Standard	MCU Pin	MCU Function
-	-	ETH_PHY_CLK	1	2	ETH_TXD3	-	-
-	-	ETH_TX_EN	3	4	ETH_TXD2	-	-
-	-	ETH_TX_ERR	5	6	ETH_TXD1	-	-
-	-	ETH_INT	7	8	ETH_TXD0	-	-
-	-	ETH_COL	9	10	ETH_TX_CLK	-	-
-	-	ETH CRS	11	12	ETH_RMII_CLK	-	-
-	-	ETH_RX_DV	13	14	ETH_RXD3	-	-
-	-	ETH_RX_ERR	15	16	ETH_RXD2	-	-
-	-	ETH_MDIO_CLK	17	18	ETH_RXD1	-	-
-	-	ETH_MDIO_DATA	19	20	ETH_RXD0	-	-
MCANA_RX	B11/GPIO235/CMP6LP	CANRX	21	22	ETH_RX_CLK	-	-
MCANA_TX	B10/GPIO234/CMP5LP	CANTX	23	24	Rsvd	Rsvd	-
SD3_D4	E9/C31/CMP2P/CMP9N/AIO207 (3)	SD-D	25	26	UARTRX	GPIO77	UARTD_RX
SD3_C4	E8/C30/CMP2P/CMP10N/AIO206 (3)	SD-C	27	28	UARTTX	GPIO86	UARTD_TX
SD2_D2	E11/CMP11P/AIO209 (3)	SD-D	29	30	SPIPCO	GPIO91 (4)	SPID_PICO
SD2_C2	GPIO48	SD-C	31	32	SPIPOCI	GPIO92 (4)	SPID_POCI
SD1_D2	E7/A31/GPIO249/CMP5P	SD-D	33	34	SPICLK	GPIO93 (4)	SPID_CLK
SD1_C2	E6/A30/GPIO248/CMP5	SD-C	35	36	SPIPTE	GPIO94	SPID_PTE
-	Rsvd	Rsv	37	38	USB_DP	-	-
-	Rsvd	Rsv	39	40	USB_DM	-	-
-	Rsvd	Rsv	41	42	Rsv	Rsvd	-
-	Rsvd	Rsv	43	44	Rsv	Rsvd	-
-	-	PWMB	45	46	PWMB	GPIO96	EPWM18_B
-	-	PWMA	47	48	PWMA	GPIO101	EPWM18_A
-	-	PWMB	49	50	PWMB	GPIO31	EPWM16_B
-	-	PWMA	51	52	PWMA	GPIO52	EPWM16_A
EPWM8_B	C7/GPIO237/CMP5HP	PWMB	53	54	PWMB	GPIO19	EPWM10_B
EPWM8_A	C6/GPIO236/CMP12LP	PWMA	55	56	PWMA	GPIO78	EPWM10_A
EPWM6_B	GPIO221	PWMB	57	58	PWMB	GPIO57	EPWM17_B
EPWM6_A	GPIO14	PWMA	59	60	PWMA	GPIO56	EPWM17_A
J2 GND				J2 GND			
-	Rsvd	Rsv	61	62	Rsv	Rsvd	-
-	Rsvd	Rsv	63	64	Rsv	Rsvd	-
-	Rsvd	Rsv	65	66	Rsv	Rsvd	-
-	Rsvd	Rsv	67	68	Rsv	Rsvd	-
-	Rsvd	Rsv	69	70	Rsv	Rsvd	-
-	Rsvd	Rsv	71	72	Rsv	Rsvd	-
-	-	ADC	73	74	ADC	-	-
-	-	ADC	75	76	ADC	-	-
-	-	ADC	77	78	ADC	-	-
-	-	ADC	79	80	ADC	-	-
-	-	ADC	81	82	ADC	-	-
-	-	ADC	83	84	ADC	-	-
-	-	ADC	85	86	ADC	-	-
-	-	ADC	87	88	ADC	-	-
-	-	ADC	89	90	ADC	-	-
-	-	ADC	91	92	ADC	-	-
-	-	ADC	93	94	ADC	-	-
-	-	ADC	95	96	ADC	-	-
Analog	B7/E27/GPIO231/CMP10HP	ADC	97	98	ADC	A11/GPIO229/CMP8HP	Analog
Analog	B6/E26/GPIO230/CMP11N/CMP9HP	ADC	99	100	ADC	A10/GPIO228/CMP7HP	Analog
Analog	-	ADC	101	102	ADC	-	-
Analog	D16/CMP10LP	ADC	103	104	ADC	D13/CMP2P/CMP5N	Analog
-	D12/CMP5P/CMP10N	ADC	105	106	ADC	C13/CMP5LP	Analog
Analog	C11/CMP11HP	ADC	107	108	ADC	C5/CMP11LP	Analog
Analog	C4/CMP10LP	ADC	109	110	ADC	A13/CMP2P	Analog
Analog	C3/E31/CMP9LP	ADC	111	112	ADC	A12/CMP1P	Analog
Analog	B17/CMP10HP	ADC/R1_A3	113	114	ADC/R1_A1	B13/CMP8LP	Analog
Analog	B16/CMP9HP	ADC/R1_A2	115	116	ADC/R1_A0	B12/CMP7LP	Analog
Analog	A5/D29/CMP1N	ADC/R0_A3	117	118	ADC/R0_A1	A3/D25/CMP1	Analog
Analog	A4/D28/CMP1P/CMP2N	ADC/R0_A2	119	120	ADC/R0_A0	A2/D24/CMP1P/CMP9N	Analog

Standard Notes:

- Pin also connects to XDS110ISO-EVM through emulator header.
- Pin also connects to XDS110ISO-EVM through J1.
- Pin also connects to DAC on XDS110ISO-EVM through emulator header.
- Pin also connects to debug header on XDS110ISO-EVM through J1.
- 5V tolerant input pin.

F29H85x SOM (rev A) Notes

- ADC differential pairs are identified using "P" and "N". See device datasheet for details.
- CMPSS pins support various connections to the CMPSS high- and low-comparator inputs. See device datasheet for details.
- Pin is input only. Output mode is not supported.
- Pin connects to PMIC SPI bus.
- May be optionally connected to PMIC SAFE_OUT1 pin through 0-ohm resistor.
- Connects to user LED.

Connector J3

MCU Function	MCU Pin	SoM Standard	Pin	Pin	SoM Standard	MCU Pin	MCU Function
-	Rsvd		Rsv	1	PWMA	-	-
-	Rsvd		Rsv	3	PWMB	-	-
-	Rsvd		Rsv	5	PWMA	-	-
-	Rsvd		Rsv	7	PWMB	-	-
-	Rsvd		Rsv	9	PWMA	-	-
-	Rsvd		Rsv	11	PWMB	-	-
-	Rsvd		Rsv	13	PWMA	-	-
-	Rsvd		Rsv	15	PWMB	-	-
-	Rsvd		Rsv	17	PWMA	-	-
-	Rsvd		Rsv	19	PWMB	-	-
-	Rsvd		Rsv	21	PWMA	-	-
-	Rsvd		Rsv	23	PWMB	-	-
-	Rsvd		Rsv	25	PWMA	-	-
-	SVO_IN		Rsv	27	PWMB	-	-
PMIC_SAFE_OUT2	PMIC	PMIC_SAFE_OUT2	Rsv	29	PWMA	-	-
PMIC_COMP2_IN-	PMIC	PMIC_COMP2_IN-	Rsv	31	PWMB	-	-
PMIC_COMP2_IN+	PMIC	PMIC_COMP2_IN+	Rsv	33	PWMA	-	-
PMIC_COMP1_IN-	PMIC	PMIC_COMP1_IN-	Rsv	35	PWMB	-	-
PMIC_COMP1_IN+	PMIC	PMIC_COMP1_IN+	Rsv	37	PWMA	-	-
PMIC_WAKE2	PMIC	PMIC_WAKE2	Rsv	39	PWMB	-	-
-	Rsvd		Rsv	41	PWMA	-	-
-	Rsvd		Rsv	43	PWMB	-	-
-	Rsvd		Rsv	45	PWMA	-	-
-	Rsvd		Rsv	47	PWMB	-	-
-	Rsvd		Rsv	49	Rsv	Rsvd	-
-	Rsvd		Rsv	51	Rsv	Rsvd	-
-	Rsvd		Rsv	53	CANTX	-	-
-	Rsvd		Rsv	55	CANRX	-	-
-	-		GPIO	57	UARTTX	-	-
GPIO247	ES/A29/GPIO247		GPIO	59	UARTRX	-	-
FSIRXC_D0	GPIO76	FSIRXC-D0	Rsv	61	SPIPTE	-	-
FSIRXC_D1	GPIO127	FSIRXC-D1	Rsv	63	SPICLK	-	-
FSIRXC_CLK	GPIO16	FSIRXC-CLK	Rsv	65	SPIPOCI	-	-
FSITXB_D0	GPIO6	FSITX-D0	Rsv	67	SPIPICO	-	-
FSITXB_D1	GPIO7	FSITX-D1	Rsv	69	I2CSCL	-	-
FSITXB_CLK	GPIO8	FSITX-CLK	Rsv	71	I2CSDA	-	-
-	Rsvd		Rsv	73	Rsv	Rsvd	-
-	Rsvd		Rsv	75	ECAT_RX1_CLK/CANRX	GPIO69	ESC_RX1_CLK
-	Rsvd		Rsv	77	ECAT_RX1_DATA0/CANTX	GPIO63	ESC_RX1_DATA0
-	Rsvd		Rsv	79	ECAT_RX1_DATA1/CANRX	GPIO64	ESC_RX1_DATA1
-	Rsvd		Rsv	81	ECAT_RX1_DATA2/CANTX	GPIO65	ESC_RX1_DATA2
ESC_LED_LINK0_ACTIVE	D7/GPIO243	ECAT_LED_LINK0_ACTIVE	Rsv	83	ECAT_RX1_DATA3/CANRX	GPIO66	ESC_RX1_DATA3
ESC_LED_LINK1_ACTIVE	D8/GPIO244	ECAT_LED_LINK1_ACTIVE/LINRX	Rsv	85	Rsv	Rsvd	-
ESC_PHY0_LINKSTATUS	GPIO55	ECAT_PHY0_LINKSTATUS/LINTX	Rsv	87	ECAT_TX1_CLK/CANTX	GPIO44	ESC_TX1_CLK
ESC_PHY1_LINKSTATUS	B9/GPIO233/CMP12HP/CMP8P	ECAT_PHY1_LINKSTATUS/LINRX	Rsv	89	ECAT_TX1_DATA0/CANRX	GPIO75	ESC_TX1_DATA0
ESC_TX1_ENA	GPIO45	ECAT_TX1_EN/LINTX	Rsv	91	ECAT_TX1_DATA1/CANTX	GPIO74	ESC_TX1_DATA1
ESC_RX1_DV	GPIO70	ECAT_RX1_DV/LINRX	Rsv	93	ECAT_TX1_DATA2/CANRX	GPIO73	ESC_TX1_DATA2
ESC_RX1_ERR	GPIO71	ECAT_RX1_ERR/LINTX	Rsv	95	ECAT_TX1_DATA3/CANTX	GPIO72	ESC_TX1_DATA3
ESC_MDIO_CLK	GPIO62	ECAT_MDIO_CLK/LINRX	Rsv	97	Rsv	Rsvd	-
ESC_MDIO_DATA	GPIO39	ECAT_MDIO_DATA/LINTX	Rsv	99	ECAT_RX0_CLK/ETH_RX_CLK	GPIO24	ESC_RX0_CLK
ESC_PHY_RSTn	D9/C29/GPIO245/CMP6N/CMP3LP	ECAT_PHY_RST/ETH_MDIO_DATA	Rsv	101	ECAT_RX0_DATA0/ETH_RXD0	GPIO80	ESC_RX0_DATA0
ESC_LED_RUN	D4/B28/GPIO240/CMP8N/CMP5LP	ECAT_LED_RUN/ETH_MDIO_CLK	Rsv	103	ECAT_RX0_DATA1/ETH_RXD1	GPIO38	ESC_RX0_DATA1
ESC_LED_ERR	D5/B29/GPIO241/CMP4	ECAT_LED_ERR/ETH_RX_ERR	Rsv	105	ECAT_RX0_DATA2/ETH_RXD2	GPIO82	ESC_RX0_DATA2
ESC_I2C_SDA	GPIO29	ECAT_I2C_SDA/ETH_RX_DV	Rsv	107	ECAT_RX0_DATA3/ETH_RXD3	GPIO83	ESC_RX0_DATA3
ESC_I2C_SCL	GPIO30	ECAT_I2C_SCL/ETH_CRIS	Rsvd	110	ETH_RMII_CLK	Rsvd	-
ESC_RX0_ERR	GPIO79	ECAT_RX0_ERR/ETH_COL	Rsv	112	ECAT_TX0_CLK/ETH_TX_CLK	GPIO85	ESC_TX0_CLK
ESC_RX0_DV	GPIO25	ECAT_RX0_DV/ETH_INT	Rsv	114	ECAT_TX0_DATA0/ETH_TXD0	GPIO87	ESC_TX0_DATA0
ESC_TX0_ENA	GPIO84	ECAT_TX0_ENA/ETH_TX_ERR	Rsv	116	ECAT_TX0_DATA1/ETH_TXD1	GPIO111	ESC_TX0_DATA1
-	PHY_QSC	ECAT_PHY0_CLK/ETH_TX_EN	Rsv	118	ECAT_TX0_DATA2/ETH_TXD2	GPIO89	ESC_TX0_DATA2
-	PHY_QSC	ECAT_PHY1_CLK/ETH_PHY_CLK	Rsv	120	ECAT_TX0_DATA3/ETH_TXD3	GPIO90	ESC_TX0_DATA3

Standard Notes:

- Pin also connects to XDS110ISO-EVM through emulator header.
- Pin also connects to XDS110ISO-EVM through J1.
- Pin also connects to DAC on XDS110ISO-EVM through emulator header.
- Pin also connects to debug header on XDS110ISO-EVM through J1.
- 5V tolerant input pin.

F29H85x SOM (rev A) Notes

- ADC differential pairs are identified using "P" and "N". See device datasheet for details.
- CMPSS pins support various connections to the CMPSS high- and low-comparator inputs. See device datasheet for details.
- Pin is input only. Output mode is not supported.
- Pin connects to PMIC SPI bus.
- May be optionally connected to PMIC SAFE_OUT1 pin through 0-ohm resistor.
- Connects to user LED.

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