

Date:

29Oct2024

HSEC180ADAPEVM Pinout:

HSEC pin	MCU pin	MCU Usage for Std	HSEC cCARD standard
1	-	-	JTAG-EMU1
3	TMS	TMS	JTAG-TMS
5	TCK	TCK	JTAG-TCK
7	GND	-	GND
9	A0/A12/B12/C12/DACOUTA	Analog (1,2)	ADC1 (and/or DACA)
11	A1/B19	Analog (1,2)	ADC1 (and/or DACB)
13	GND	-	GND
15	A8/C24/GPIO211	Analog (1,2)	ADC1 (and/or CMPIN+)
17	A9/C25/GPIO212	Analog (1,2)	ADC1
19	GND	-	GND
21	GND	-	ADC1 (and/or CMPIN+)
23	A2/B20	Analog (1,2)	ADC1
25	A6/GPIO209	Analog (1,2)	ADC (and/or CMPIN+)
27	A7/GPIO210	Analog (1,2)	ADC
29	GND	-	GND
31	A14/B14/C14/TESTANA0	Analog (1,2)	ADC
33	A15/B15/C15/TESTANA1	Analog (1,2)	ADC
35	GND	-	GND
37	B0/A24/VDAC	Analog (1,2)	ADC
39	B1/A25/DACOUTC	Analog (1,2)	ADC
41	-	-	Rsv
43	-	-	VREFLO
45	VREFHIA	VREFHIA	VREFHI
47	GND	-	GND
49	GPIO0	EPWM1_A	PWM1A
51	GPIO1	EPWM1_B	PWM1B
53	GPIO2	EPWM2_A	PWM2A
55	GPIO3	EPWM2_B	PWM2B

HSEC cCARD standard	MCU Usage for Std	MCU pin	HSEC pin
JTAG-EMU0	-	-	2
JTAG-TRStn	-	-	4
JTAG-TDO	TDO	GPIO223	6
JTAG-TDI	TDI	GPIO222	8
GND	-	GND	10
ADC2	-	GND	12
ADC2	Analog (1,2)	A10/C26/GPIO213	14
GND	-	GND	16
ADC2	Analog (1,2)	A3/B21	18
ADC2	-	GND	20
GND	-	GND	22
ADC2	Analog (1,2)	A11/C27/GPIO214	24
ADC2	-	GND	26
ADC	Analog (1,2)	C2/B26	28
ADC	Analog (1,2)	C3/B27/GPIO206	30
Rsv	-	-	32
ADC	-	GND	34
ADC	Analog (1,2)	B2/A26/C22/ADCINCA10	36
GND	-	GND	38
ADC	-	GND	40
ADC	Analog (1,2)	C4/B28/GPIO205	42
Rsv	-	-	44
GND	-	GND	46
SV0	-	SV0_IN	48
PWMA or TZ1 or FSIRX-D0	EPWM3_A	GPIO4	50
PWMB or TZ2 or FSIRX-CLK	EPWM3B	GPIO5	52
PWMA or TZ3	EPWM4_A	GPIO46	54
PWMB or TZ4	EPWM4_B	GPIO47	56

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119

GPIO8

GPIO9

GPIO10

GPIO11

GND

GPIO54

GPIO55

GPIO56

GPIO57

GPIO91

GPIO92

GPIO93

GPIO94

GND

GPIO104

GPIO105

GPIO25

GPIO32

GPIO33 (c)

GPIO51

GND

GPIO122

GPIO123

GPIO49

GPIO40

GPIO124

GPIO126

GND

PMIC

-

SV0\_OUT\_CAN

3V3\_OUT

EPWM5\_A

EPWM5\_B

EPWM6\_A

EPWM6\_B

-

SPIA\_PICO

SPIA\_POCI

SPIA\_CLK

SPIA\_PTE

SPID\_PICO

SPID\_POCI

SPID\_CLK

SPID\_PTE

-

I2CSDA

I2CSCL

GPIO

GPIO

GPIO

GPIO

GND

SD1\_D1

SD1\_C1

SD2\_D1

SD2\_C1

SD1\_D2

SD1\_D3

GND

PMIC\_SAFE\_OUT2

-

Rsv/PMIC\_SAFE\_OUT

-

SV0\_OUT\_CAN

-

PWMA

PWMB

PWMA

PWMB or FSIRX-D1

GND

SPISIMO

SPISOMI

SPICLK

SPISTE

eCAP or SPISIMO

eCAP or SPISOMI or FSITX-D1

eCAP or SPICLK or FSITX-D0

eCAP or SPISTE or FSITX-CLK

GND

I2CSDA

I2CSCL

GPIO

GPIO

GPIO

GPIO

GND

SD-D

SD-C

SD-D

SD-C

SD-D

SD-C

GND

Rsv/PMIC\_SAFE\_OUT

Rsv

Rsv/PMIC\_SAFE\_OUT

Rsv

SV0

SV0\_IN

GPIO12

GPIO13

GPIO14

GPIO15

-

GPIO20

GPIO21

GPIO98

GPIO99

GPIO28

GPIO29

GPIO7

GPIO6

SV0\_IN

GPIO52

GPIO53

GPIO62

GPIO69

GPIO75

GPIO97

SV0\_IN

GPIO100

GPIO101

GPIO27

GPIO103

GPIO108

GPIO19

SV0\_IN

PMIC

-

NC

GPIO120

121

123

125

127

129

131

133

135

137

139

141

143

145

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GPIO50

GPIO77

GPIO133

GPIO79

GPIO78

GPIO166

GPIO165

GND

GPIO87

GPIO131

GPIO130

GPIO134

GPIO132

GPIO90

GPIO89

GPIO110

GPIO111

GPIO112

GND

GPIO67

GPIO96

GPIO95

-

-

-

PMIC

PMIC

PMIC

PMIC

GND

SD2\_D2

EPWM9\_B

EPWM9\_A

EPWM10\_B

EPWM10\_A

EPWM11\_B

EPWM11\_A

-

SD3\_D4

EPWM13\_B

EPWM13\_A

EPWM14\_B

EPWM14\_A

EPWM15\_B

EPWM15\_A

FSIRXB\_D0

FSIRXB\_D1

FSIRXB\_CLK

-

EPWM17\_A

EPWM18\_B

EPWM18\_A

-

-

-

PMIC\_COMP2\_IN+

PMIC\_COMP2\_IN-

PMIC\_COMP1\_IN+

PMIC\_COMP1\_IN-

-

GPIO

GPIO

GPIO

GPIO

GPIO

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GND

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GPIO

GND

GPIO168

GPIO167

GPIO42

GPIO43

GPIO38

GPIO39

GPIO88

GPIO136

GPIO106

GPIO107

GPIO108

GPIO119

GPIO120

GPIO116

GPIO125

GPIO31 (7)

GPIO30

GPIO68

SV0\_IN

-

-

-

-

-

-

PMIC\_WAKE2

-

-

PMIC

-

PMIC

SV0\_IN

3. Boot mode pin.

4. Connects to PMIC SPI bus.

5. Alternate location for CANA pins. Other location is in J1.36 and J1.38.

6. Connects to PMIC DIAG\_OUT pin.

7. Connects to user LED.

8. May be optionally connected to PMIC\_SAFE\_OUT1 pin through 0-ohm resistor.