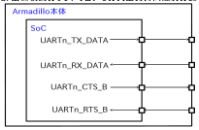
Armadillo-IoT ゲートウェイ G3
CON2(アドオンインターフェース2) マルチプレクス表

ピン番号	信号名	CON1共通[a]	i.MX7D ピン名	リセット解除後の信号状態			マルチプレクス機能(i.MX7Dの信号名で表記)												Armadillo-IoT アドオンモジュールの使用機能							CON1, CON2共通機能[d]
				機能	In/Out	Pull-Up/Pull-Down	GPIO	UART2[b]	UART3[b]	UART4[b]	CSPI1	CSPI3	CSPI4	I2C1	I2C2	I2C3	CAN1[c]	CAN2[c]	RS232C RS00	RS232C/422/485 RS01	RS485 RS02	BLE BT00	EnOcean EN00	WI-SUN WS00	DIDOAD DA00	
1	GND																		GND	GND	GND	GND	GND	GND	GND	GND
2	GND																		GND	GND	GND	GND	GND	GND	GND	GND
3	NC																									NC
4	NC																									NC
5	NC																									NC
6	NC																									NC
7	NC																									NC
8	NC																									NC
9	NC																									NC
10	NC																									NC
11	NC																									NC
12	NC																									NC
13	NC																									NC
14	NC																									NC
15	NC																									NC
16	NC																									NC
17	NC																									NC
18	NC																									NC
19	NC																									NC
20	GPIO4_IO8	○	I2C1_SCL	GPIO	In	100kΩ Pull-Down	GPIO4_IO8			UART4_CTS_B		ECSPI3_MISO		I2C1_SCL			FLEXCAN1_RX		I2C1_SCL (EEPROM_SCL)	I2C1_SCL (EEPROM_SCL)	I2C1_SCL (EEPROM_SCL)	I2C1_SCL (EEPROM_SCL)	I2C1_SCL (EEPROM_SCL)	I2C1_SCL (EEPROM_SCL)	I2C1_SCL (EEPROM_SCL)	EEPROM_SCL
21	GPIO4_IO9	○	I2C1_SDA	GPIO	In	100kΩ Pull-Down	GPIO4_IO9			UART4_RTS_B		ECSPI3_MOSI		I2C1_SDA			FLEXCAN1_TX		I2C1_SDA (EEPROM_SDA)	I2C1_SDA (EEPROM_SDA)	I2C1_SDA (EEPROM_SDA)	I2C1_SDA (EEPROM_SDA)	I2C1_SDA (EEPROM_SDA)	I2C1_SDA (EEPROM_SDA)	I2C1_SDA (EEPROM_SDA)	EEPROM_SDA
22	NC																									NC
23	NC																									NC
24	GPIO4_IO10	○	I2C2_SCL	GPIO	In	100kΩ Pull-Down	GPIO4_IO10			UART4_RX_DATA		ECSPI3_SCLK			I2C2_SCL										GPIO4_IO10 (DO1)	I2C_SCL/GPIO
25	GPIO4_IO11	○	I2C2_SDA	GPIO	In	100kΩ Pull-Down	GPIO4_IO11			UART4_TX_DATA		ECSPI3_SS0			I2C2_SDA										GPIO4_IO11 (DO2)	I2C_SDA/GPIO
26	GND																		GND	GND	GND	GND	GND	GND	GND	GND
27	GND																		GND	GND	GND	GND	GND	GND	GND	GND
28	VCC_3.3V_IO																		VCC_3.3V_IO	VCC_3.3V_IO	VCC_3.3V_IO	VCC_3.3V_IO	VCC_3.3V_IO	VCC_3.3V_IO	VCC_3.3V_IO	VCC_3.3V_IO
29	VCC_3.3V																									VCC_3.3V
30	VCC_5V																									VCC_5V
31	DETECT_CON2				Out	NO Pull-Up (VCC_3.3V_IO) 固定													EEPROM_E0	EEPROM_E0	EEPROM_E0	EEPROM_E0	EEPROM_E0	EEPROM_E0	EEPROM_E0	EEPROM_E0
32	GPIO4_IO2	○	UART2_RXD	GPIO	In	100kΩ Pull-Down	GPIO4_IO2	UART2_RX_DATA			ECSPI1_SS3				I2C2_SCL					GPIO4_IO2 (HALF/FULL*)	GPIO4_IO2 (RS485_DE)		GPIO4_IO2 (PROG_EN)			GPIO0
33	GPIO5_IO11	○	SD2_RESET_B	GPIO	In	100kΩ Pull-Down	GPIO5_IO11					ECSPI3_RDY									GPIO5_IO11 (RS485_RE*)						GPIO1
34	GPIO4_IO3	○	UART2_TXD	GPIO	In	100kΩ Pull-Down	GPIO4_IO3	UART2_TX_DATA			ECSPI1_RDY				I2C2_SDA												SPI_RDY/GPIO
35	GPIO4_IO6	○	UART3_RTS	GPIO	In	100kΩ Pull-Down	GPIO4_IO6		UART3_RTS_B		ECSPI1_SCLK												ECSPI1_SCLK (SCLKDIO1)		ECSPI1_SCLK (ADC_CLK)	SPI_SCLK/GPIO
36	GPIO4_IO4	○	UART3_RXD	GPIO	In	100kΩ Pull-Down	GPIO4_IO4		UART3_RX_DATA		ECSPI1_MISO												ECSPI1_MISO (RSDADIO3)		ECSPI1_MISO (ADC_DOUT)	SPI_MISO/GPIO
37	GPIO4_IO5	○	UART3_TXD	GPIO	In	100kΩ Pull-Down	GPIO4_IO5		UART3_TX_DATA		ECSPI1_MOSI												ECSPI1_MOSI (WSDADIO2)		ECSPI1_MOSI (ADC_DIN)	SPI_MOSI/GPIO
38	GPIO3_IO3	○	LCD_VSYNC	GPIO	In	100kΩ Pull-Down	GPIO3_IO3	UART2_CTS_B					ECSPI4_SS0						UART2_CTS_B (RTS)	UART2_CTS_B (RTS)		UART2_CTS_B (CTS/PIO5)		UART2_CTS_B (CTS)		UART_DTE_RTS(Output)/GPIO
39	GPIO3_IO2	○	LCD_HSYNC	GPIO	In	100kΩ Pull-Down	GPIO3_IO2	UART2_RTS_B					ECSPI4_SCLK						UART2_RTS_B (CTS)	UART2_RTS_B (CTS)		UART2_RTS_B (RTS/PIO6)		UART2_RTS_B (RTS)		UART_DTE_CTS(Input)/GPIO
40	GPIO3_IO1	○	LCD_ENABLE	GPIO	In	100kΩ Pull-Down	GPIO3_IO1	UART2_TX_DATA					ECSPI4_MOSI						UART2_TX_DATA (TXD)	UART2_TX_DATA (TXD)	UART2_TX_DATA (UART_TXD)	UART2_TX_DATA (UART_RX)	UART2_TX_DATA (AVDO6/RXD)	UART2_TX_DATA (RXD)		UART_DTE_TXD(Output)/GPIO
41	GPIO3_IO0	○	LCD_CLK	GPIO	In	100kΩ Pull-Down	GPIO3_IO0	UART2_RX_DATA					ECSPI4_MISO						UART2_RX_DATA (RXD)	UART2_RX_DATA (RXD)	UART2_RX_DATA (UART_RXD)	UART2_RX_DATA (UART_TX)	UART2_RX_DATA (AVDO7/TXD)	UART2_RX_DATA (TXD)		UART_DTE_RXD(Input)/GPIO
42	GPIO4_IO12	○	I2C3_SCL	GPIO	In	100kΩ Pull-Down	GPIO4_IO12									I2C3_SCL		FLEXCAN2_RX	GPIO4_IO12 (FORCEOFF*)	GPIO4_IO12 (RS485/RS232*)		GPIO4_IO12 (WAKE_HW)	GPIO4_IO12 (RESET)	GPIO4_IO12 (RESET)		GPIO2
43	GPIO4_IO13	○	I2C3_SDA	GPIO	In	100kΩ Pull-Down	GPIO4_IO13									I2C3_SDA		FLEXCAN2_TX		GPIO4_IO13 (ISOLATOR_VE1)		GPIO4_IO13 (WAKE_SW)		GPIO4_IO13 (NMIX)	GPIO4_IO13 (ISOLATOR_VE1)	GPIO3
44	NC																									NC
45	NC																									NC
46	GPIO6_IO19	○	SAI2_TXFS	GPIO	In	100kΩ Pull-Down	GPIO6_IO19			UART4_RX_DATA		ECSPI3_MISO							GPIO6_IO19 (RI)			GPIO6_IO19 (CMD/MLDP)				GPIO4
47	GPIO6_IO20	○	SAI2_TXC	GPIO	In	100kΩ Pull-Down	GPIO6_IO20			UART4_TX_DATA		ECSPI3_MOSI							GPIO6_IO20 (DCD)						GPIO6_IO20 (DI2)	GPIO5
48	GPIO6_IO21	○	SAI2_RXD	GPIO	In	100kΩ Pull-Down	GPIO6_IO21	UART2_CTS_B		UART4_CTS_B		ECSPI3_SCLK							GPIO6_IO21 (DSR)						GPIO6_IO21 (DI1)	GPIO6
49	GPIO6_IO22	○	SAI2_TXD	GPIO	In	100kΩ Pull-Down	GPIO6_IO22	UART2_RTS_B		UART4_RTS_B		ECSPI3_SS0							GPIO6_IO22 (DTR)							GPIO7
50	GPIO4_IO7	○	UART3_CTS	GPIO	In	100kΩ Pull-Down	GPIO4_IO7		UART3_CTS_B		ECSPI1_SS0												ECSPI1_SS0 (SCSEDIO0)		GPIO4_IO7 (CS*/SHDN)	SPI_SS/GPIO
51	NC																									NC
52	NC																									NC
53	NC																									NC
54	GND																		GND	GND	GND	GND	GND	GND	GND	GND
55	PMIC_ONOFF				In	47kΩ Pull-Up (3V), 固定																				PMIC_ONOFF
56	CON2_USB_VBUS																									USB_VBUS
57	CON2_USB_VBUS																									USB_VBUS
58	GND																		GND	GND	GND	GND	GND	GND	GND	GND
59	CON2_USB_HS_DP		USB HUB搭載 (TUSB HSIC	USB																						USB_DP
60	CON2_USB_HS_DM		USB HUB搭載 (TUSB HSIC	USB																						USB_DM

[a] CON1と信号が共有されています。拡張基板の設計の際は、信号の衝突にご注意ください。
[b] 出荷状態のソフトウェアでの入出力方向は次の通りです。



[c] ソフトウェア未対応（2016年6月現在）
[d] アットマークテクノ製アドオンモジュールで想定している機能設定です。CON1とCON2が同一ピン配置になるように、使用するピンと機能を制限しています。