armStoneA5 GPIO Reference Card V1.1 23.02.2014

Pin Layout for Board Rev. 1.1

J12	Function	Device	GPIO	Mode	/sys/class/gpio/gpio#	
1	V33OUT					
2	V5OUT					
3	COL0	GPIO	PTD2	IO	81	
4	COL1	GPIO	PTD3	IO	82	
5	COL2	GPIO	PTD4	IO	83	
6	COL3	GPIO	PTD5	IO	84	
7	COL4	GPIO	PTD6	IO	85	
8	COL5	GPIO	PTD29	IO	65	
9	COL6	GPIO	PTD30	IO	64	
10	COL7	GPIO	PTD31	IO	63	
11	GND					
12	SPI_CLK / COL11	SPI	PTB22	IO	44	
13	UART_B_TXD	UART	PTD0	IO	79	
14	SPI_CS / COL10	SPI	PTB19	IO	41	
15	UART_B_RXD	UART	PTD1	IO	80	
16	SPI_MOSI / COL9 / I2C_SCL	SPI / GPIO / I2C	PTB21 / PTB21 / PTD28	IO / IO / IO	43 / 43 / 66	
17	SPI_MISO / COL8 / I2C_SDA	SPI / GPIO / I2C	PTB20 / PTB20 / PTD27	IO / IO / IO	42 / 42 / 67	
18	ROW0	GPIO	PTD24	IO	70	
19	ROW1	GPIO	PTD25	IO	69	
20	ROW2	GPIO	PTD26	IO	68	
21	ROW3	GPIO	PTA8	IO	1	JTAG
22	ROW4	GPIO	PTA9	IO	2	JTAG
23	ROW5	GPIO	PTA10	IO	3	JTAG
24	ROW6	GPIO	PTA11	IO	4	JTAG
25	ROW7	GPIO	PTA12	IO	5	JTAG
26	KBINT	GPIO	PTB23	IO	93	
27	GND					
28	PWM1	GPIO	PTB1	IO	23	
29	ANALOGIN0	AIN	ADC0_SE8			
30	PWM2	LCD	PTB8	IO	30	
31	ANALOGIN1	AIN	ADC0_SE9			
32	PWM3	GPIO	PTB9	IO	31	
33	ANALOGIN2	AIN	ADC1_SE8			
34	VCFL_ON	GPIO	PTC29	IO	102	
35	ANALOGIN3	AIN	ADC1_SE9			

J12	Function	Device	GPIO	Mode	/sys/class/gpio/gpio#	
36	UART_C_RXD(2)	UART	PTA21	I	11	
37	GND					
38	UART_C_TXD(1)	UART	PTA20	O	10	
39	V33OUT					
40	V5OUT					
41	MICIN	AUDIO				
42	GND					
43	-					
44	LINEIN_R	AUDIO				
45	LINEOUT_R	AUDIO				
46	GND					
47	GND					
48	LINEIN_L	AUDIO				
49	LINEOUT_L	AUDIO				
50	GND					
51	/RESET					
52	V33OUT					
53	-					
54	-					
55	UART_A_RXD(2)	UART	PTB5	I	27	
56	UART_A_RTS(1)	UART	PTB6	O	28	
57	UART_A_TXD(1)	UART	PTB4	O	26	
58	UART_A_CTS(2)	UART	PTB7	I	29	
59	-					
60	-					
61	GND					
62	V5OUT					
63	CAN_A_L / CAN_A_RX(3)		- / PTB14	- / IO	36	
64	CAN_A_H / CAN_A_TX(3)		- / PTB15	- / IO	37	
65	BOOTSEL(4)		PTE1	IO	106	
66	V33OUT					

(1) Pin can theoretically be used as General Purpose Output only and carries RS232 level then
(2) Pin can theoretically be used as General Purpose Input only and expects RS232 level then
(3) Pin can only serve GPIO function on hardware without the optional CAN transceiver
(4) The BOOTSEL pin is only checked on start-up, later it carries another signal (VSYNC on armStoneA5); so don't set this pin fix to supply voltage V33 or GND! Use a resistor to function as pull-up or pull-down!