

3. I/O Multiplexing and Considerations

3.1 I/O Multiplexing

VQFN20	SOIC20	SOIC14	Pin name (1,2)	Special	ADC0	AC0	DAC0	ZCD3	USARTn	SPI0	TWI0(4)	TCA0	TCBn	TCD0	EVSYS	CCL-LUTn
17	4	4	PA0	XTAL32K1 XTALHF1 EXTCLK					0,TxD	MOSI ⁽³⁾	SDA(H) ⁽³⁾	WO0				0,IN0
18	5	5	PA1	XTAL32K2 XTALHF2					0,RxD	MISO ⁽³⁾	SCL(H) ⁽³⁾	WO1				0,IN1
19	6		PA2	TWI Fm+	AIN22				0,XCK 0,TxD ⁽³⁾		SDA(H)	WO2	0,WO		EVOUTA	0,IN2
20	7		PA3	TWI Fm+	AIN23				0,XDIR 0,RxD ⁽³⁾		SCL(H)	WO3	1,WO			0,OUT
1	8		PA4		AIN24				0,TxD ⁽³⁾	MOSI		WO4		WOA		
2	9		PA5		AIN25				0,RxD ⁽³⁾	MISO		WO5		WOB		
3	10		PA6		AIN26				0,XCK ⁽³⁾	SCK				WOC		0,OUT ⁽³⁾
4	11		PA7	CLKOUT	AIN27	OUT		ZCOUT	0,XDIR ⁽³⁾	SS				WOD	EVOUTA ⁽³⁾	
5	12	6	PC1		AIN29 ⁽⁶⁾				1,RxD 0,TxD ⁽³⁾	SS ⁽³⁾ MISO ⁽³⁾ MOSI ⁽³⁾		WO1 ⁽³⁾				1,IN1
6	13	7	PC2	TWI Fm+	AIN30 ⁽⁶⁾	AINN3 ⁽⁶⁾		ZCIN	1,XCK 0,RxD ⁽³⁾	SCK ⁽³⁾ MISO ⁽³⁾	SDA(C) SDA(H) ⁽³⁾	WO2 ⁽³⁾			EVOUTC	1,IN2
7	14	8	PC3	TWI Fm+	AIN31 ⁽⁶⁾	AINP4 ⁽⁶⁾			1,XDIR 0,XCK ⁽³⁾	SS ⁽³⁾ SCK ⁽³⁾	SCL(C) SCL(H) ⁽³⁾	WO3 ⁽³⁾				1,OUT
8	15	9	VDDIO2													
9	16	10	PD4		AIN4				0,TxD ⁽³⁾	MOSI ⁽³⁾		WO4 ⁽³⁾		WOC ⁽³⁾		
10	17	11	PD5		AIN5				0,RxD ⁽³⁾	MISO ⁽³⁾		WO5 ⁽³⁾		WOD ⁽³⁾		
11	18	12	PD6		AIN6	AINP3	VOUT		0,XCK ⁽³⁾ 1,TxD ⁽³⁾	SCK ⁽³⁾						2,OUT ⁽³⁾
12	19	13	PD7	VREFA	AIN7	AINN2			0,XDIR ⁽³⁾ 1,RxD ⁽³⁾	SS ⁽³⁾					EVOUTD ⁽³⁾	
13	20	14	VDD													
14	1	1	GND													
15	2	2	PF6 ⁽⁵⁾	RESET												
16	3	3	PF7	UPDI						SS ⁽³⁾					EVOUTF ⁽³⁾	

Notes:

1. The pin names are of Pxn type, with x being the PORT instance (A, B, C, ...) and n, the pin number. The notation for signals is PORTx_PINn. All pins can be used as event input.
2. All pins can be used for external interrupt.
3. Alternate pin positions. For selecting the alternate positions, refer to the *PORTMUX - Port Multiplexer* section.
4. The TWI pins that can be used as host or client are marked H. The pins with client-only are marked C.
5. Input-only.
6. ADC and AC inputs are available on MVIO pins (PORTC) if the MVIO is disabled in the SYSCFG1.MVSYSCFG fuse setting.