33.2 Alternate Pin Functions

The tables below show the primary/default function for each pin on a port in the first column, the pin number in the second column, and then all alternate pin functions in the remaining columns. The head row shows what peripheral that enable and use the alternate pin functions.

For better flexibility, some alternate functions also have selectable pin locations for their functions, this is noted under the first table where this apply.

Table 33-1. Port A - alternate functions.

PORT A	PIN#	INTERRUPT	ADCA POS/ GAINPOS	ADCB POS	ADCA NEG	ADCA GAINNEG	ACA POS	ACA NEG	ACA OUT	REFA
GND	60									
AVCC	61									a Plant
PA0	62	SYNC	ADC0	ADC8	ADC0		AC0	AC0		AREF
PA1	63	SYNC	ADC1	ADC9	ADC1		AC1	AC1		1
PA2	64	SYNC/ASYNC	ADC2	ADC10	ADC2		AC2			THE STATE OF
PA3	1	SYNC	ADC3	ADC11	ADC3		AC3	AC3		
PA4	2	SYNC	ADC4	ADC12	The second	ADC4	AC4			
PA5	3	SYNC	ADC5	ADC13	The second	ADC5	AC5	AC5		
PA6	4	SYNC	ADC6	ADC14		ADC6	AC6		AC1OUT	
PA7	5	SYNC	ADC7	ADC15		ADC7		AC7	AC0OUT	

Table 33-2. Port B - alternate functions.

PORT B	PIN#	INTERRUPT	ADCA POS	ADCB POS/ GAINPOS	ADCB NEG	ADCB GAINNEG	ACB POS	ACB NEG	ACB OUT	DACB	REFB	JTAG
РВ0	6	SYNC	ADC8	ADG0	ADC0		ACO	AC0			AREF	
PB1	7	SYNC	ADC9	ADC1	ADC1		AC1	AC1	No.			
PB2	8	SYNC/ASYNC	ADC10	ADC2	ADC2		AC2			DAC0		
РВ3	9	SYNC	ADC11	ADC3	ADG3		AG3	AC3		DAC1		
PB4	10	SYNC	ADG12	ADC4		ADC4	A64		His S			TMS
PB5	11	SYNC	ADC13	ADC5		ADO5	AC5	AC5				TDI
PB6	12	SYNC	ADC14	ADC6		ADC6	AC6		ACTOUT)			TCK
PB7	13	SYNC	ADC15	ADC7		ADC7		AC7	ACCOUT		-	TDO
GND	14									11/200		
vcc	15											



Table 33-3. Port C - alternate functions.









PORT C	PIN#	INTERRUPT	TCC0	AWEXC	TCC1	USARTC0	USARTC1	SPIC	TWIC	сьоскоит	EVENTOUT
PC0	16	SYNC	OC0A	OC0ALS					SDA		
PC1	17	SYNC	ОСОВ	OC0AHS		/ XCKO			SCL		
PC2	18	SYNC/ASYNC	OCOC	OCOBLS		RXD0			1		
PC3	19	SYNC	OCOD	OC0BHS		TXD0					
PC4	20	SYNC		OCOCLS	OC1A	1		SS			
PC5	21	SYNC		OCOCH S	OC1B		xck1	MOSI			
PC6	22	SYNC		OCODLS			RXD1	MISO		clk _{RTC}	
PC7	23	SYNC		OCODH S			TXD1	SCK		clk _{PER}	EVOUT
GND	24										
vcc	25										

Notes:

- 1. Pin mapping of all TC0 can optionally be moved to high nibble of port.
- 2. If TC0 is configured as TC2 all eight pins can be used for PWM output.
- Pin mapping of all USART0 can optionally be moved to high nibble of port.
 Pins MOSI and SCK for all SPI can optionally be swapped.
- 5. CLKOUT can optionally be moved between port C, D and E and between pin 4 and 7.
- 6. EVOUT can optionally be moved between port C, D and E and between pin 4 and 7.

Table 33-4. Port D - alternate functions.



PORT D	PIN#	INTERRUPT	TCD0	TCD1	USBD	USARTD0	USARTD1	SPID	CLOCKOUT	EVENTOUT
PD0	26	SYNC	TOCOAT							
PD1	27	SYNC	ОСОВ			XCK0				
PD2	28	SYNC/ASYNC	OCOC			RXD0				
PD3	29	SYNC	OCOD			TXD0				
PD4	30	SYNC	F D B	OC1A				SS		
PD5	31	SYNC		OC1B			XEKT	MOSI		
PD6	32	SYNC			D-		RXD1	MISO		
PD7	33	SYNC			D+		TXD1	SCK	OKPER	EVOUT
GND	34									
vcc	35									

Table 33-5. Port E - alternate functions.

PORT E	PIN#	INTERRUPT	TCE0	TCE1	USARTE0	TWIE
PE0	36	SYNC	OC0A			SDA
PE1	37	SYNC	OC0B		> \ XCK0	SCL
PE2	38	SYNC/ASYNC	ococ		RXD0	
PE3	39	SYNC	OC0D		TXD0	
PE4	40	SYNC		OC1A		
PE5	41	SYNC		OC1B		
TOSC2	42					
TOSC1	43					
GND	44					
VCC	45					

Table 33-6. Port F - alternate functions.

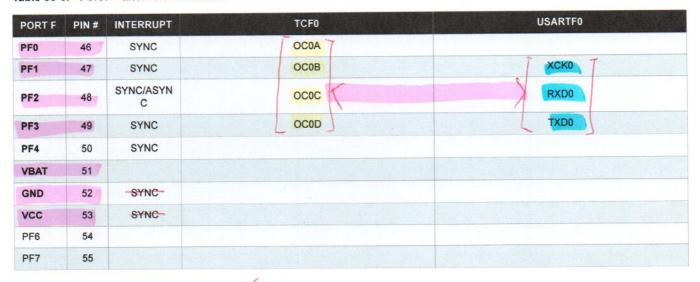
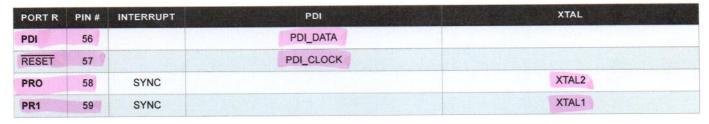


Table 33-7. Port R - alternate functions. V





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