	PDIP	SOIC	
RESET [1	20	vcc
(RXD) PD0	2	19	PB7 (SCK)
(TXD) PD1	3	18	PB6 (MISO)
XTAL2	4	17	PB5 (MOSI)
XTAL1	5	16	□ PB4
(INTO) PD2	6	15	☐ PB3 (OC1)
(INT1) PD3 🗆	7	14	□ PB2
(T0) PD4 🗆	8	13	☐ PB1 (AIN1)
(T1) PD5 🗆	9	12	PB0 (AINO)
GND □	10	11	PD6 (ICP)

Name	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
SREG		Т	н	S	V	N	Z	С	
SPL	SP7	SP6	SP5	SP4	SP3	SP2	SP1	SP0	
GIMSK	INT1	INTO	-	_	-	_	-	ı	
GIFR	INTF1	INTF0							
TIMSK	TOIE1	OCIE1A	_	_	TICIE1	_	TOIE0	ı	
TIFR	TOV1	OCF1A	_	_	ICF1	_	TOVO	-	
MCUCR	_	_	SE	SM	ISC11	ISC10	ISC01	ISC00	
TCCR0	_	_	_	_	_	CS02	CS01	CS00	
TCNT0		Timer/Counter0 (8 Bits)							
TCCR1A	COM1A1	COM1A0	-	-	-	-	PWM11	PWM10	
TCCR1B	ICNC1	ICES1		_	CTC1	CS12	CS11	CS10	
TCNT1H			Timer	Counter1 - Cou	nter Register Hig	gh Byte			
TCNT1L	Timer/Counter1 – Counter Register Low Byte								
OCR1AH	Timer/Counter1 - Compare Register High Byte								
OCR1AL	Timer/Counter1 – Compare Register Low Byte								
ICR1H	Timer/Counter1 – Input Capture Register High Byte								
ICR1L			Timer/Co	ounter1 - Input C	apture Register	Low Byte			
WDTCR	-	-	-	WDTOE	WDE	WDP2	WDP1	WDP0	
EEAR	-	EEPROM Address Register							
EEDR				EEPROM D	ata Register				
EECR	-	-	_	-	-	EEMWE	EEWE	EERE	
PORTB	PORTB7	PORTB6	PORTB5	PORTB4	PORTB3	PORTB2	PORTB1	PORTB0	
DDRB	DDB7	DDB6	DDB5	DDB4	DDB3	DDB2	DDB1	DDB0	
PINB	PINB7	PINB6	PINB5	PINB4	PINB3	PINB2	PINB1	PINB0	
PORTD	_	PORTD6	PORTD5	PORTD4	PORTD3	PORTD2	PORTD1	PORTD0	
DDRD	-	DDD6	DDD5	DDD4	DDD3	DDD2	DDD1	DDD0	
PIND	_	PIND6	PIND5	PIND4	PIND3	PIND2	PIND1	PIND0	
UDR		UART VO Data Register							
USR	RXC	TXC	UDRE	FE	OR	_	-	_	
UCR	RXCIE	TXCIE	UDRIE	RXEN	TXEN	CHR9	RXB8	TXB8	
UBRR		UART Baud Rate Register							
ACSR	ACD	_	ACO	ACI	ACIE	ACIC	ACIS1	ACIS0	

mov	add	ср	bst	rjmp	nop
ldi	adc	cpc	bld	reall	sleep
in	adiw	cpi	bclr	ijmp	wdr
out	inc	tst	cset	icall	
lds	sub	and	sbi	ret	
sts	sbc	andi	cbi	reti	
ld	subi	cbr	lsl	brbc	
st	sbci	or	lsr	brbs	
ldd	sbiw	ori	rol	sbic	
std	dec	sbr	ror	sbis	
push	neg	eor	asr	cpse	
pop	com	clr			
lpm	mul	ser			
swap					

P1.0 = P1.1 = P1.2 = P1.3 = P1.4 = P1.5 = P1.6 = P1.7 = P1	1 2 3 4 5 6 7	U	40 39 38 37 36 35 34 33	P0.0 (AD0) P0.1 (AD1) P0.2 (AD2) P0.3 (AD3) P0.4 (AD4) P0.5 (AD5) P0.6 (AD6)
(TxD) P3.1 (INT0) P3.2 (INT1) P3.3 (T0) P3.4 (T1) P3.5	11 12 13 14 15		30 29 28 27 26	☐ ALE/PROG☐ PSEN☐ P2.7 (A15)☐ P2.6 (A14)☐ P2.5 (A13)☐
(WR) P3.6 ☐ (RD) P3.7 ☐ XTAL2 ☐ XTAL1 ☐ Vss ☐	16 17 18 19 20		25 24 23 22 21	☐ P2.4 (A12) ☐ P2.3 (A11) ☐ P2.2 (A10) ☐ P2.1 (A9) ☐ P2.0 (A8)
L				_

mov movc movx push pop xch xchd swap	add addc da sbb inc dec mul ab div ab	anl orl xrl clr setb cpl rl rlc rr rrc	ljmp ajmp sjmp jmp jz/jnz jc/jnc jb/jnb jbc djnz cjne lcall acall ret reti

		_							
0F0h	RG «B»								
0E0h	Acc								
0D0h	PSW	CY	AC	F0	RS_1	RS_0	OV	F1	P
0B8h	IP	-	-	-	PS	PT_1	PX_1	PT_0	PX_0
0B0h	3								
0A8h	IE	EA	-	-	ES	ET_1	EX_1	ET_0	EX_0
0A0h	2								
099h	SBUF								
098h	SCON	SM_0	SM_1	SM_2	Ren	Tb8	Rb8	TI	RI
090h	1								
08Dh	1								
08Ch	0								
08Bh	<i>L</i> 1								
08Ah	L0								
089h	TMOD	Gate	C/T	M1	M0	Gate	C/T	M1	M 0
088h	TCON	TF_1	TR_1	TF_0	TR_0	IE_1	IT_1	IE_0	IT_0
087h	PCON	smod	-	1	-	GF_1	GF_0	PD	IDL
083h	DPH								
082h	DPL								
081h	SP								
080h	0								
07Fh									
030h									
02Fh	128								
020h									
01Fh	RG-								
000h									

