

Register Summary

| Address | Nama | D# 7 | D# 6 | D# 5 | Dia 4 | D:+ 2 | D# 0 | D:4 1 | D:+ 0 | Do |
|----------------------------|----------|---|--|--------|--------------------|--------|---------|--------|--------|--------------------|
| Address | Name | Bit 7 | Bit 6 | Bit 5 | Bit 4 | Bit 3 | Bit 2 | Bit 1 | Bit 0 | Page |
| \$3F (\$5F) | SREG | 1 | <u> </u> | Н | S | V | N | Z | С | page 16 |
| \$3E (\$5E) | Reserved | | 1 | 1 | T | ı | ı | ı | | |
| \$3D (\$5D) | SPL | SP7 | SP6 | SP5 | SP4 | SP3 | SP2 | SP1 | SP0 | page 17 |
| \$3C (\$5C) | Reserved | | 1 | | 1 | 1 | 1 | ı | | |
| \$3B (\$5B) | GIMSK | INT1 | INT0 | - | - | _ | _ | _ | _ | page 22 |
| \$3A (\$5A) | GIFR | INTF1 | INTF0 | | | | | | | page 23 |
| \$39 (\$59) | TIMSK | TOIE1 | OCIE1A | _ | - | TICIE1 | - | TOIE0 | - | page 23 |
| \$38 (\$58) | TIFR | TOV1 | OCF1A | - | _ | ICF1 | - | TOV0 | _ | page 24 |
| \$37 (\$57) | Reserved | | | | | | | | | |
| \$36 (\$56) | Reserved | | • | | T | ı | ı | | | |
| \$35 (\$55) | MCUCR | - | - | SE | SM | ISC11 | ISC10 | ISC01 | ISC00 | page 25 |
| \$34 (\$54) | Reserved | | • | • | | | | | | |
| \$33 (\$53) | TCCR0 | _ | _ | _ | _ | _ | CS02 | CS01 | CS00 | page 29 |
| \$32 (\$52) | TCNT0 | Timer/Counter0 (8 Bits) | | | | | | | | page 29 |
| \$31 (\$51) | Reserved | | | | | | | | | |
| \$30 (\$50) | Reserved | | | | | | | | | |
| \$2F (\$4F) | TCCR1A | COM1A1 | COM1A0 | - | - | _ | _ | PWM11 | PWM10 | page 31 |
| \$2E (\$4E) | TCCR1B | ICNC1 | ICES1 | | - | CTC1 | CS12 | CS11 | CS10 | page 32 |
| \$2D (\$4D) | TCNT1H | Timer/Counter1 – Counter Register High Byte | | | | | | | | page 33 |
| \$2C (\$4C) | TCNT1L | Timer/Counter1 – Counter Register Low Byte | | | | | | | | page 33 |
| \$2B (\$4B) | OCR1AH | Timer/Counter1 - Compare Register High Byte | | | | | | | | page 34 |
| \$2A (\$4A) | OCR1AL | | Timer/Counter1 – Compare Register Low Byte | | | | | | | |
| \$29 (\$49) | Reserved | | | | | | | | | |
| \$28 (\$48) | Reserved | | | | | | | | | |
| \$27 (\$47) | Reserved | | | | | | | | | |
| \$26 (\$46) | Reserved | | | | | | | | | |
| \$25 (\$45) | ICR1H | Timer/Counter1 – Input Capture Register High Byte | | | | | | | | page 34 |
| \$24 (\$44) | ICR1L | Timer/Counter1 – Input Capture Register Low Byte | | | | | | | | page 34 |
| \$23 (\$43) | Reserved | | | | • | | • | | | |
| \$22 (\$42) | Reserved | | | | | | | | | |
| \$21 (\$41) | WDTCR | _ | _ | _ | WDTOE | WDE | WDP2 | WDP1 | WDP0 | page 37 |
| \$20 (\$40) | Reserved | | | | | | | | | 1 |
| \$1F (\$3F) | Reserved | | | | | | | | | |
| \$1E (\$3E) | EEAR | - EEPROM Address Register | | | | | | | | page 39 |
| \$1D (\$3D) | EEDR | EEPROM Data Register | | | | | | | | page 39 |
| \$1C (\$3C) | EECR | _ | _ | _ | | _ | EEMWE | EEWE | EERE | page 40 |
| \$1B (\$3B) | Reserved | | | | 1 | | | | | page 10 |
| \$1A (\$3A) | Reserved | | | | | | | | | |
| \$19 (\$39) | Reserved | | | | | | | | | |
| \$18 (\$38) | PORTB | PORTB7 | PORTB6 | PORTB5 | PORTB4 | PORTB3 | PORTB2 | PORTB1 | PORTB0 | page 50 |
| \$17 (\$37) | DDRB | DDB7 | DDB6 | DDB5 | DDB4 | DDB3 | DDB2 | DDB1 | DDB0 | page 50 |
| \$16 (\$36) | PINB | PINB7 | PINB6 | PINB5 | PINB4 | PINB3 | PINB2 | PINB1 | PINB0 | page 50 |
| \$15 (\$35) | Reserved | | | | | | | | | F90 00 |
| \$14 (\$34) | Reserved | | | | | | | | | |
| \$13 (\$33) | Reserved | | | | | | | | | |
| \$12 (\$32) | PORTD | | PORTD6 | PORTD5 | PORTD4 | PORTD3 | PORTD2 | PORTD1 | PORTD0 | page 56 |
| \$11 (\$31) | DDRD | _ | DDD6 | DDD5 | DDD4 | DDD3 | DDD2 | DDD1 | DDD0 | page 56 |
| \$10 (\$30) | PIND | | PIND6 | PIND5 | PIND4 | PIND3 | PIND2 | PIND1 | PIND0 | page 56 |
| φτο (φου) | Reserved | | TINDO | TINDS | I IND4 | TINDO | I IIVDE | TINDI | TINDO | page 30 |
| \$0C (\$2C) | UDR | UART I/O Data Register | | | | | | | | page 45 |
| \$0C (\$2C) \$0B (\$2B) | USR | RXC | TXC | UDRE | FE FE | OR OR | | | | page 45 page 45 |
| | | | | | | | CHBO | DVDO | TVPO | |
| \$0A (\$2A) | UCR | RXCIE | | | | | | | | page 46 |
| \$09 (\$29) \$08 (\$28) | UBRR | ACD | _ | 1 400 | | | ACIC | ACIS1 | ACIEO | page 48 |
| \$08 (\$28) | ACSR | ACD | | ACO | ACI | ACIE | ACIC | ACIS1 | ACIS0 | page 48 |
| #00 (#00) | Reserved | | | | | | | | | |
| \$00 (\$20) | Reserved | | | | the element of the | | | D | 1 1/6 |) mamary addrassas |

Notes: 1. For compatibility with future devices, reserved bits should be written to zero if accessed. Reserved I/O memory addresses should never be written.

2. Some of the Status Flags are cleared by writing a logical "1" to them. Note that the CBI and SBI instructions will operate on all bits in the I/O Register, writing a "1" back into any flag read as set, thus clearing the flag. The CBI and SBI instructions work with registers \$00 to \$1F only.