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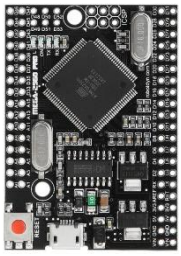


Mega2650PRO Datasheet

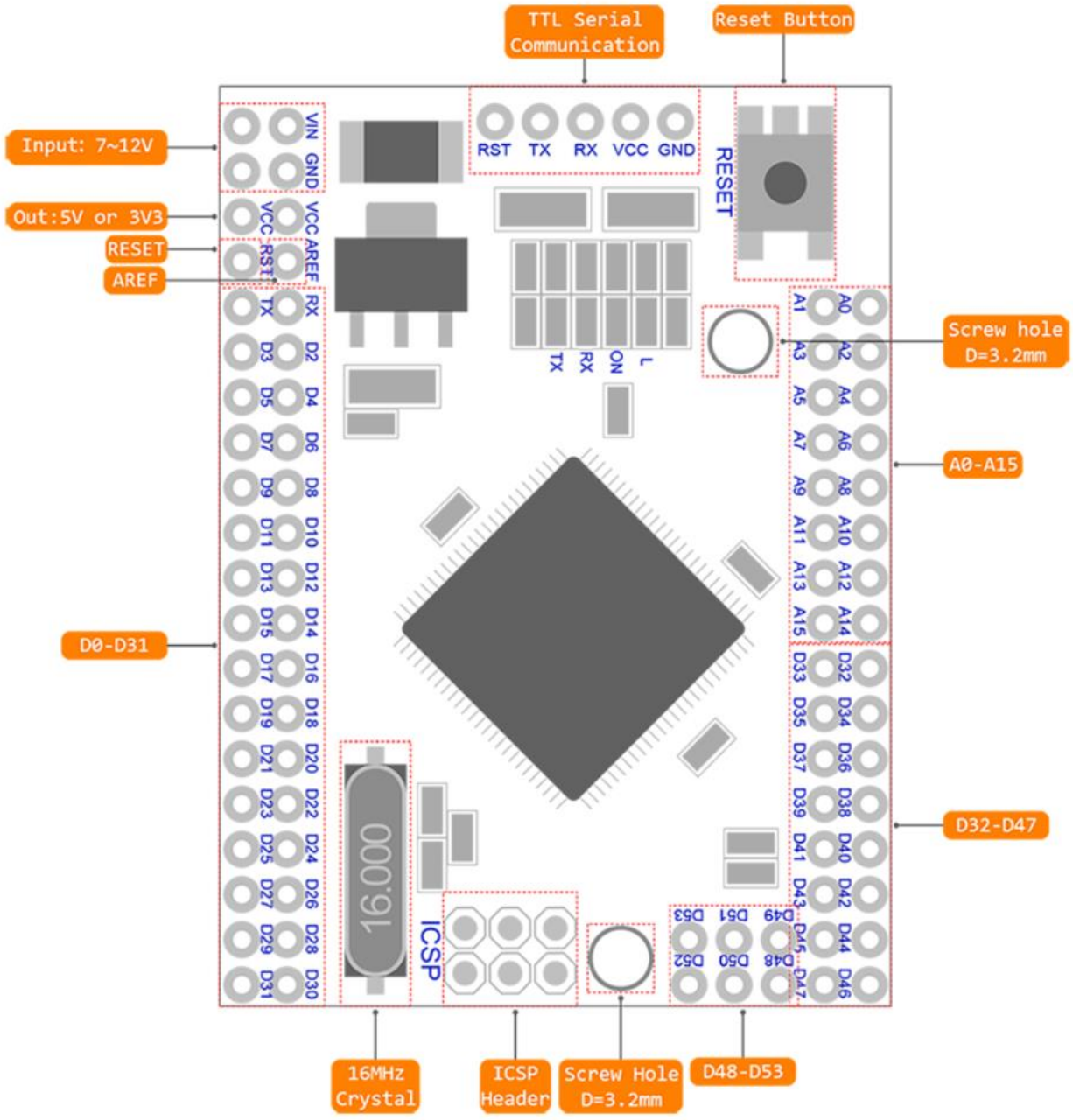
Mega 2650 PRO mini 5V ATMEGA 2650-16AU Development Board

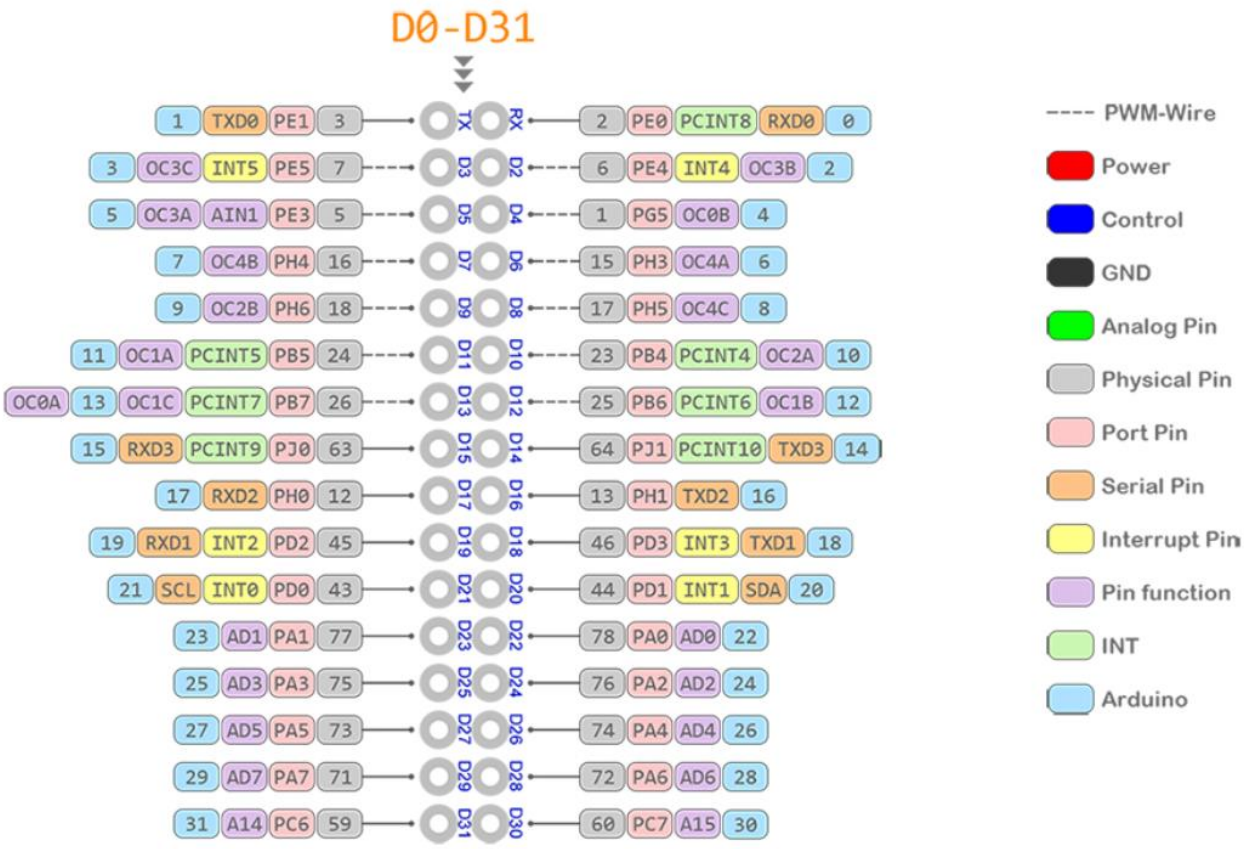
- Embedded version of Mega 2560 CH340G/ATmega2560 compatible with Arduino Mega 2560 board, built on Atmel ATmega2560 microcontroller and USB-UART interface chip CH340G.
- The board has a compact size of 38x55mm. It is a good solution to make the final project on the prototype board.
- The functionality of the board is similar to the Arduino Mega2560. It is an embedded board and uses the original chip of ATmega2560 (16MHz).
- The board uses the chip CH340G as a UART-USB converter. Its function in the frequency 12MHz, leads to a stable data exchange (the driver must be installed).
- Mega PRO (Embedded) 2560 CH340G/ATmega 2560 can be connected to the computer through micro USB cable.
- Power supply of the board is via the microUSB connector or via pin headers. The voltage regulator (LDO) can handle an input voltage of 6 V to 9 V (peak 18 V) DC. The output current is over 800 mA at 5 V (please note that the higher the input voltage, the lower the output current). This will provide reliable performance in the initial projects.

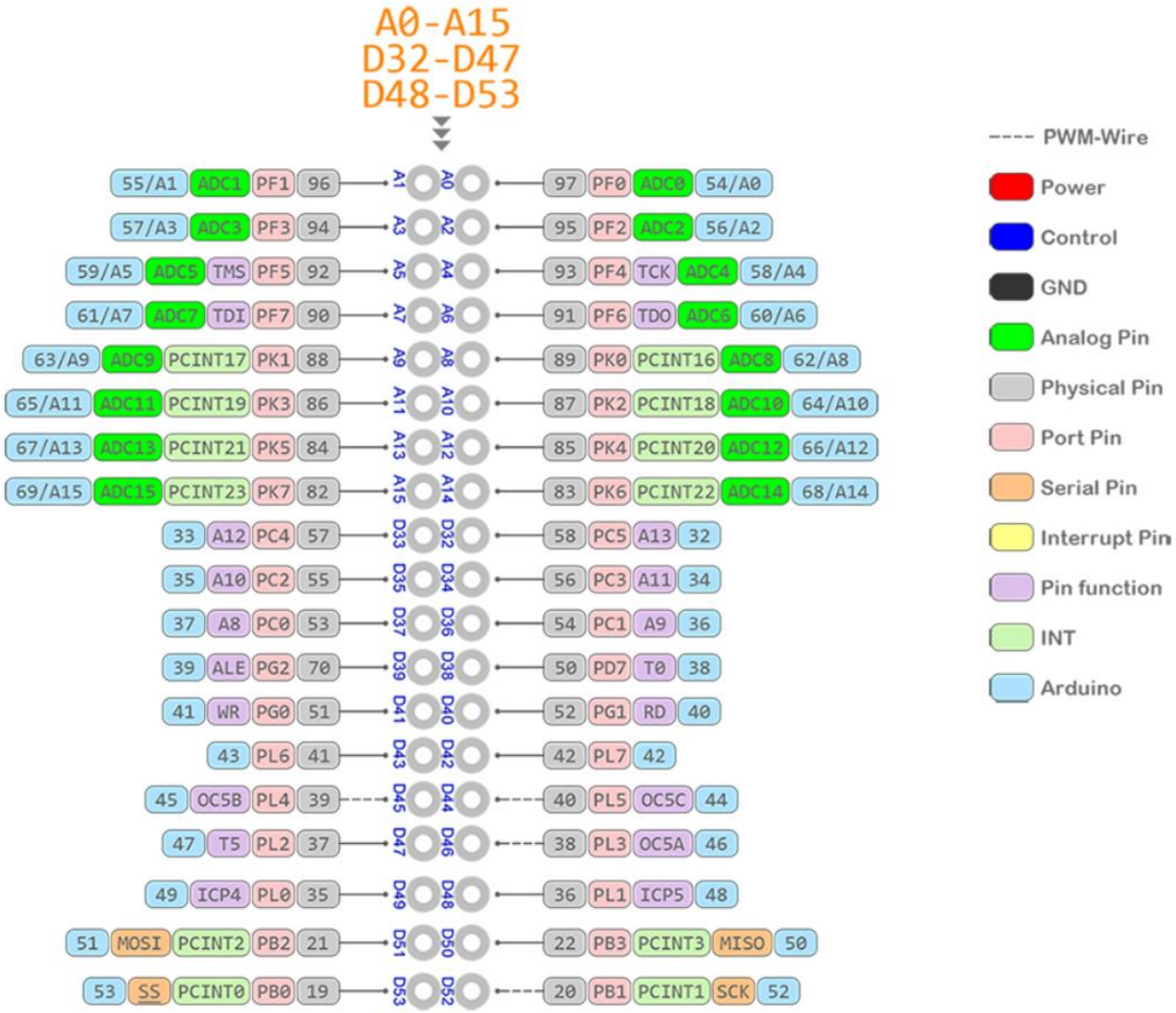
Microcontroller	ATmega 2560
USB-TTL converter	CH340
Power Out	5V-800mA
Power In	5V
Power In VIN/DC Jack	5V
Power Consumption	5V 220mA
Logic Level	5V

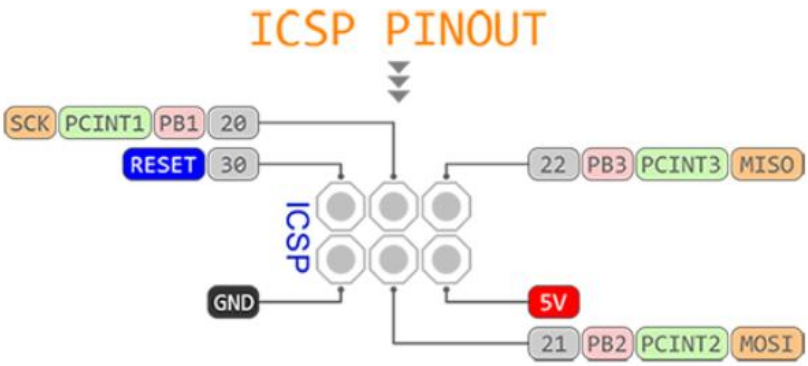
USB	Micro USB
Clock Frequency	16MHz
Operating Supply Voltage	5V
Digital I/O	54
Analog I/O	16
Memory Size	256kb
Data RAM Type/Size	8Kb
Data ROM Type/Size	4Kb
Interface Type	ISP
Operating temperature	−40C°/+85C°
Board’s Size	38×54mm

Pinout Diagram

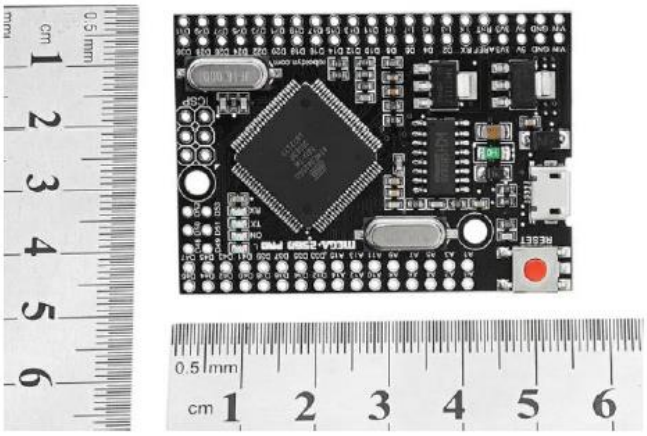


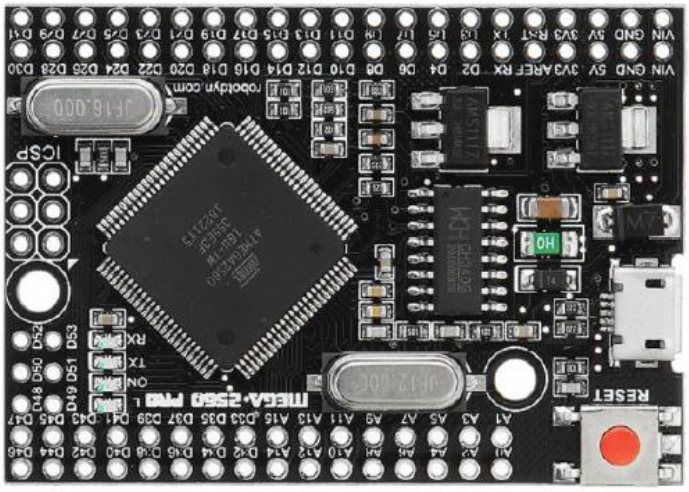

D0-D31
1 TXD0 PE1 3 TX RX 2 PE0 PCINT8 RXD0 0
3 OC3C INT5 PE5 7 D3 D2 6 PE4 INT4 OC3B 2
5 OC3A AIN1 PE3 5 D5 D4 1 PG5 OC0B 4
7 OC4B PH4 16 D7 D6 15 PH3 OC4A 6
9 OC2B PH6 18 D9 D8 17 PH5 OC4C 8
11 OC1A PCINT5 PB5 24 D11 D10 23 PB4 PCINT4 OC2A 10
OC0A 13 OC1C PCINT7 PB7 26 D13 D12 25 PB6 PCINT6 OC1B 12
15 RXD3 PCINT9 PJ0 63 D15 D14 64 PJ1 PCINT10 TXD3 14
17 RXD2 PH0 12 D17 D16 13 PH1 TXD2 16
19 RXD1 INT2 PD2 45 D19 D18 46 PD3 INT3 TXD1 18
21 SCL INT0 PD0 43 D21 D20 44 PD1 INT1 SDA 20
23 AD1 PA1 77 D23 D22 78 PA0 AD0 22
25 AD3 PA3 75 D25 D24 76 PA2 AD2 24
27 AD5 PA5 73 D27 D26 74 PA4 AD4 26
29 AD7 PA7 71 D29 D28 72 PA6 AD6 28
31 A14 PC6 59 D31 D30 60 PC7 A15 30
PWM-Wire
Power
Control
GND
Analog Pin
Physical Pin
Port Pin
Serial Pin
Interrupt Pin
Pin function
INT
Arduino

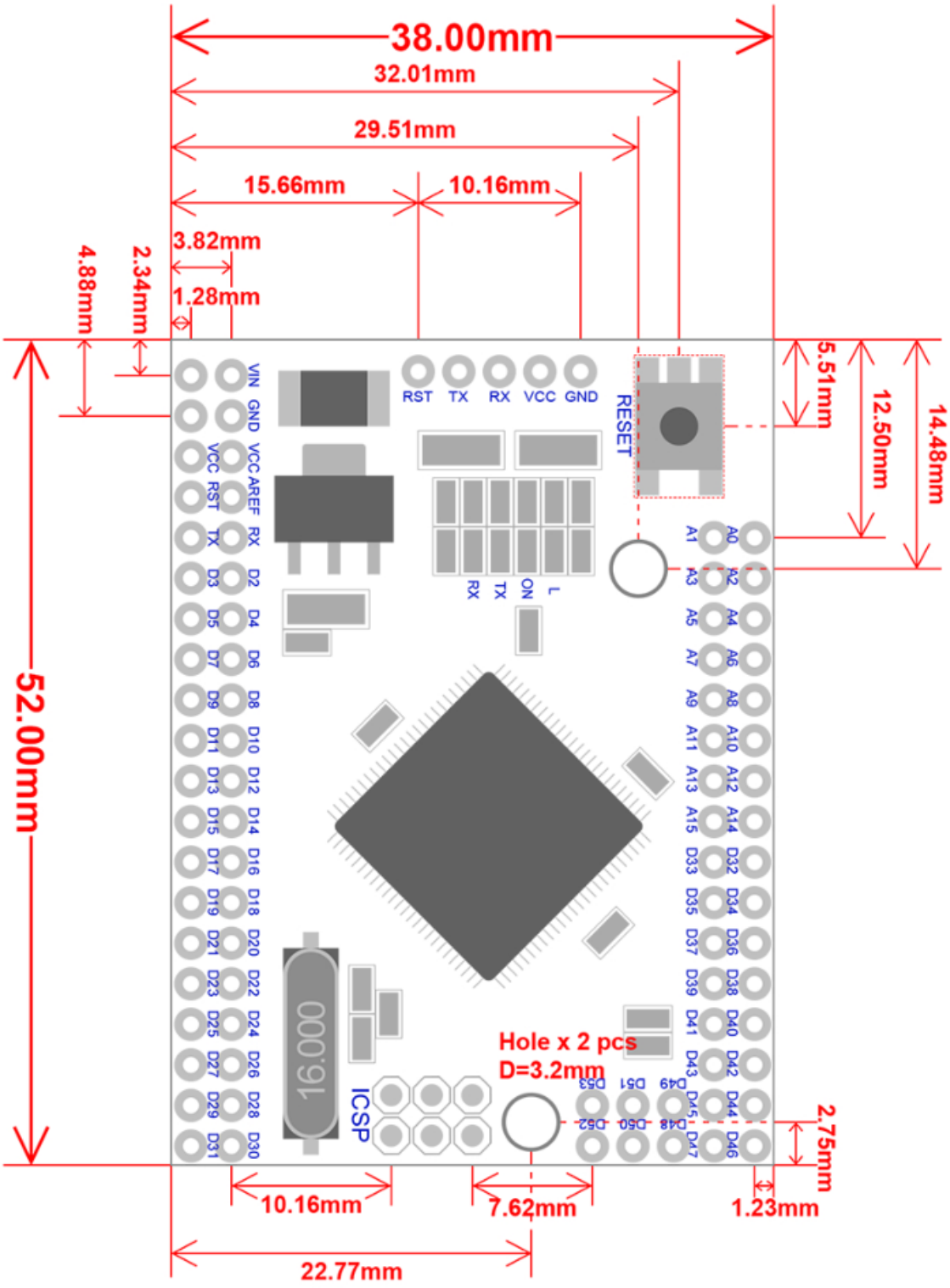

A0-A15
D32-D47
D48-D53
55/A1 ADC1 PF1 96 A1 A0 97 PF0 ADC0 54/A0
57/A3 ADC3 PF3 94 A3 A2 95 PF2 ADC2 56/A2
59/A5 ADC5 TMS PF5 92 A5 A4 93 PF4 TCK ADC4 58/A4
61/A7 ADC7 TDI PF7 90 A7 A6 91 PF6 TDO ADC6 60/A6
63/A9 ADC9 PCINT17 PK1 88 A9 A8 89 PK0 PCINT16 ADC8 62/A8
65/A11 ADC11 PCINT19 PK3 86 A11 A10 87 PK2 PCINT18 ADC10 64/A10
67/A13 ADC13 PCINT21 PK5 84 A13 A12 85 PK4 PCINT20 ADC12 66/A12
69/A15 ADC15 PCINT23 PK7 82 A15 A14 83 PK6 PCINT22 ADC14 68/A14
33 A12 PC4 57 D33 D32 58 PC5 A13 32
35 A10 PC2 55 D35 D34 56 PC3 A11 34
37 A8 PC0 53 D37 D36 54 PC1 A9 36
39 ALE PG2 70 D39 D38 50 PD7 T0 38
41 WR PG0 51 D41 D40 52 PG1 RD 40
43 PL6 41 D43 D42 42 PL7 42
45 OC5B PL4 39 D45 D44 40 PL5 OC5C 44
47 T5 PL2 37 D47 D46 38 PL3 OC5A 46
49 ICP4 PL0 35 D49 D48 36 PL1 ICP5 48
51 MOSI PCINT2 PB2 21 D51 D50 22 PB3 PCINT3 MISO 50
53 SS PCINT0 PB0 19 D53 D52 20 PB1 PCINT1 SCK 52
---- PWM-Wire
Power
Control
GND
Analog Pin
Physical Pin
Port Pin
Serial Pin
Interrupt Pin
Pin function
INT
Arduino


ICSP PINOUT
SCK PCINT1 PB1 20
RESET 30
22 PB3 PCINT3 MISO
ICSP
GND
5V
21 PB2 PCINT2 MOSI

Dimension Diagrams






38.00mm
32.01mm
29.51mm
15.66mm
10.16mm
3.82mm
1.28mm
4.88mm
2.34mm
52.00mm
5.51mm
12.50mm
14.48mm
RST TX RX VCC GND
RESET
RX TX ON L
ICSP
Hole x 2 pcs
D=3.2mm
2.75mm
10.16mm
7.62mm
1.23mm
22.77mm