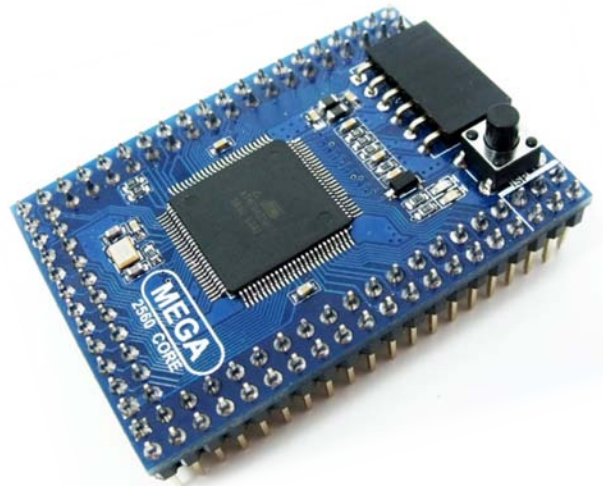


## ● Introduce

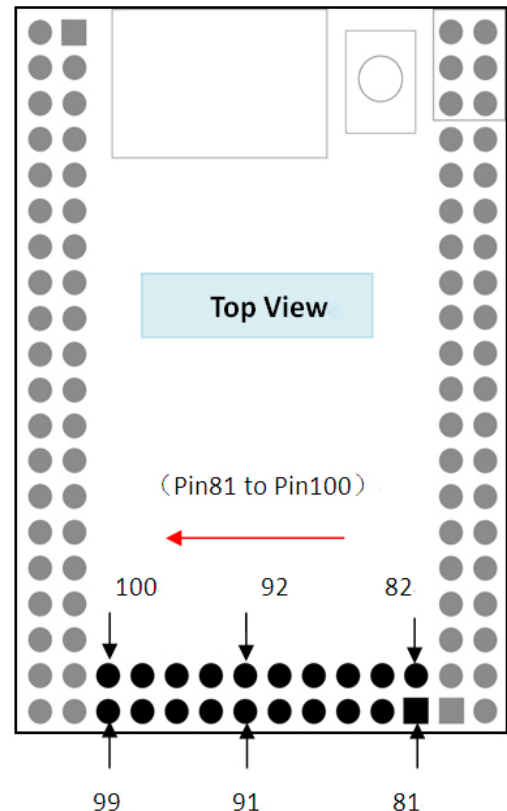
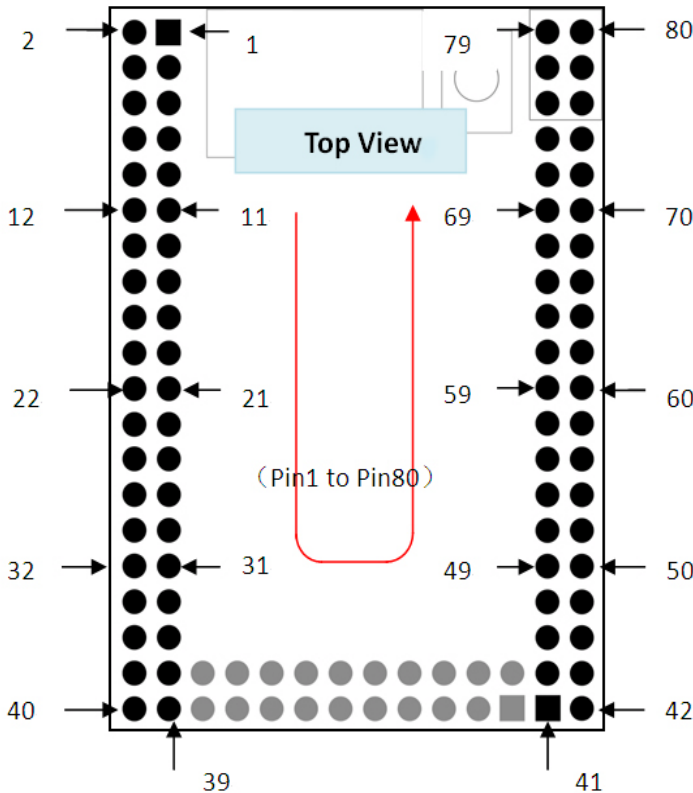
Mega2560-CORE is a small, complete and breadboard-friendly board base on the ATmega2560. Its design is based on the Arduino Mega2560, so we can use it as a Arduino Mega2560 development board. In a different place, it lacks only a 6-foot download port and a reset switch. Reducing the hardware circuit that can we reduce the power consumption and the cost. Mega2560-CORE has a matching download line and the other one end of the download cable is a USB interface, so it is very convenient for use.

## ● Features

- Microcontroller ATmega2560
- Operating Voltage (logic level) 3.3V or 5 V
- Digital I/O Pins 54 (of which 15 provide PWM output)
- Analog Input Pins 16
- DC Current per I/O Pin 40 mA
- Flash Memory 256KB
- SRAM 8 KB
- EEPROM 4KB (ATmega2560)
- Clock Speed 16 MHz
- Low power consumption, low cost



## ● Pin Number Figure Schematic



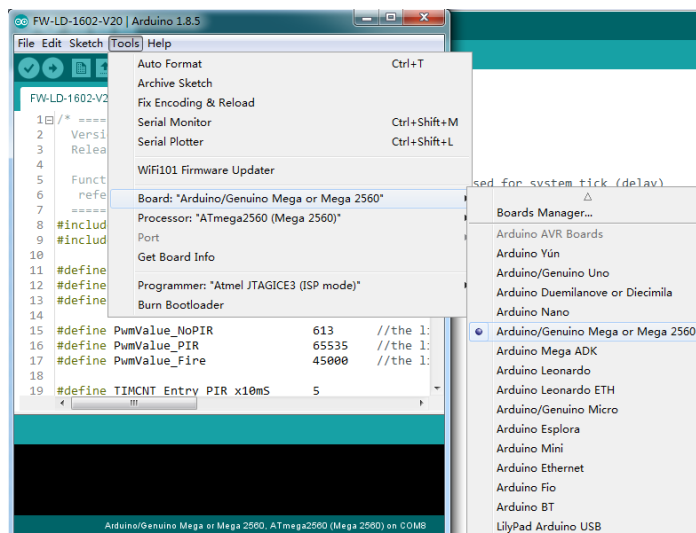
● Pin Description Table (Support on Arduino - Massduino\_Support\_Package\_V50)

Pin	Function /MCU	Arduino Mega2560	Pin	Function /MCU	Arduino Mega2560	Pin	Function /MCU	Arduino Mega2560
1	VCC		40	GND		79	PB3	D50
2	VCC		41	AGND		80	VCC	
3	PG5	D4	42	AGND		81	VCC	
4	PE0	RXD	43	ADC0	A0/D54	82	VCC	
5	PE1	TXD	44	VREF		83	PC7	D30
6	PE3	PWM/D5	45	ADC2	A2/D56	84	PC6	D31
7	PE4	PWM/D2	46	ADC1	A1/D55	85	PC5	D32
8	PE5	PWM/D3	47	ADC4	A4/D58	86	PC4	D33
9	PE6	D74	48	ADC3	A3/D57	87	PC3	D34
10	PE7	D75	49	ADC6	A6/D60	88	PC2	D35
11	TXD3	D14	50	ADC5	A5/D59	89	PC1	D36
12	RXD3	D15	51	ADC8	A8/D62	90	PC0	D37
13	TXD2	D16	52	ADC7	A7/D61	91	PG1	D40
14	RXD2	D17	53	ADC10	A10/D64	92	PG0	D41
15	TXD1	D18	54	ADC9	A9/D63	93	PD7	D38
16	RXD1	D19	55	ADC12	A12/D66	94	PD6	D72
17	SDA	D20	56	ADC11	A11/D65	95	PD5	D71
18	SCL	D21	57	ADC14	A14/D68	96	PD4	D70
19	PH2	D78	58	ADC13	A13/D67	97	PG4	D77
20	PH3	PWM/D6	59	PJ2	D80	98	reserv	
21	PH4	PWM/D7	60	ADC15	A15/D69	99	GND	
22	PH5	PWM/D8	61	PJ4	D82	100	GND	
23	PH6	PWM/D9	62	PJ3	D81			
24	PB0	53	63	PJ6	D84			
25	PB4	PWM/D10	64	PJ5	D83			
26	PB5	PWM/D11	65	PA7	D29			
27	PB6	PWM/D12	66	PG2	D39			
28	PB7	PWM/D13	67	PA5	D27			
29	PL0	D49	68	PA6	D28			
30	PL1	D48	69	PA3	D25			
31	PL2	D47	70	PA4	D26			
32	PL3	PWM/D46	71	PA1	D23			
33	PL4	PWM/D45	72	PA2	D24			
34	PL5	PWM/D44	73	PJ7	D85			
35	PL6	43	74	PA0	D22			
36	PL7	42	75	RESET				
37	PH7	D79	76	GND				
38	PG3	D76	77	PB1	D52			
39	GND		78	PB2	D51			

## ● Arduino IDE selection

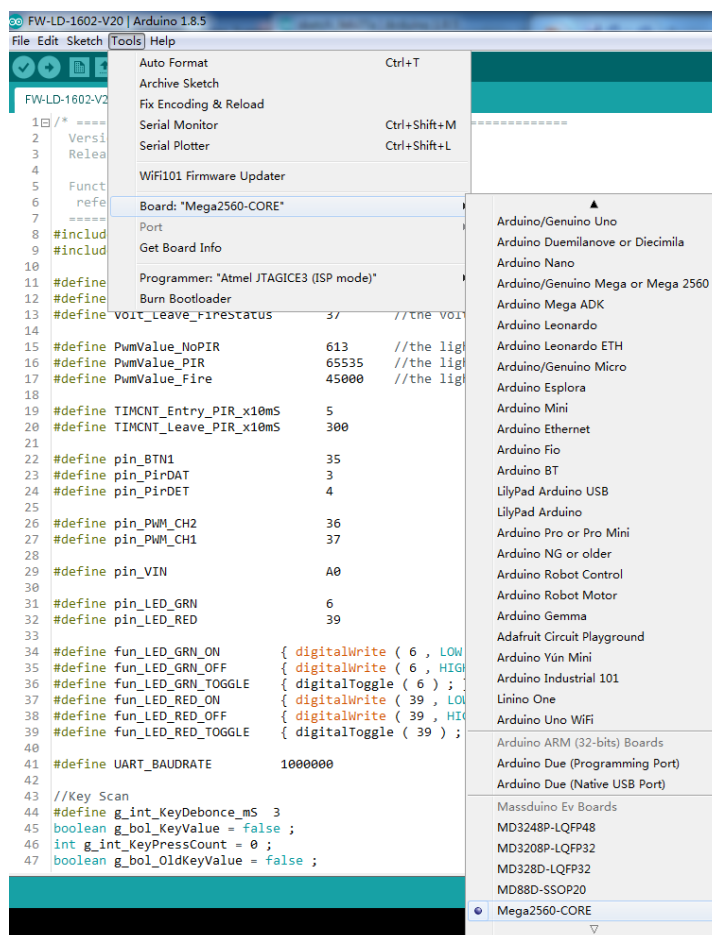
You can choose two boards to development Mega2560-CORE.

1: use standard Mega2560 library , this option allow user to development as the standard Mega2560 board.

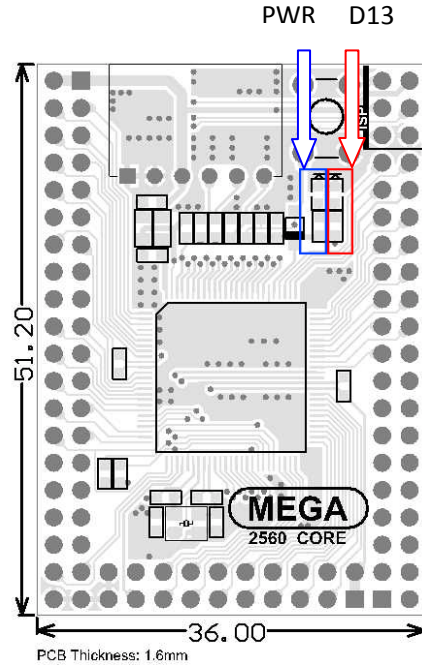


2: download Arduino - Massduino\_Support\_Package\_V50 from [www.inhaos.com](http://www.inhaos.com) and install it , then you can choice Mega2560-CORE . this will allow user to use the high level feature like :

- ◆ More digital Pin assigned
- ◆ Rich PWM setting
- ◆ 10bit 11bit 12bit 13bit 14bit 15bit 16bit ADC fuction
- ◆ MsTimer 0,1,2,3,4 support
- ◆ ... etc , please refer the document : UM-MASSDUINO-V50-EN.docx



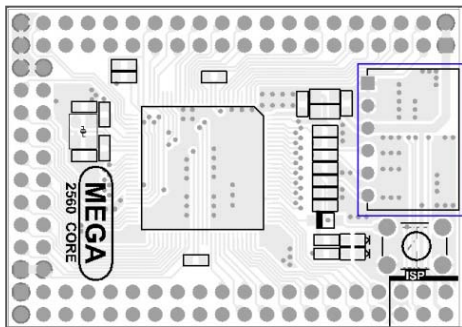
## ● Indicator Description



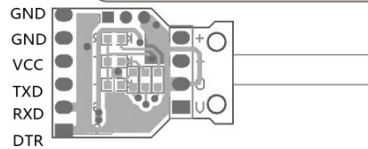
## ● Programming Connection

There are two way to download and they are as follows

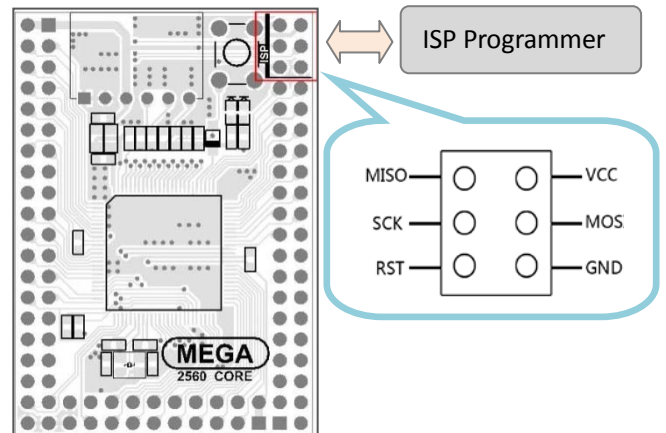
### 1、 Upload via Arduino AVR



**USB to Serial Light**  
 UC-340G: [http://www.inhaos.com/product\\_info.php?products\\_id=159](http://www.inhaos.com/product_info.php?products_id=159)  
 UC-2102: [http://www.inhaos.com/product\\_info.php?products\\_id=120](http://www.inhaos.com/product_info.php?products_id=120)  
**Isolation USB to Serial adaptor:**  
 UC-3100P: [http://www.inhaos.com/product\\_info.php?products\\_id=124](http://www.inhaos.com/product_info.php?products_id=124)



### 2、 Programming via ISP



## Contact us

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