UNO-LC / MassDuino LC

Arduino UNO Compatible Development Board

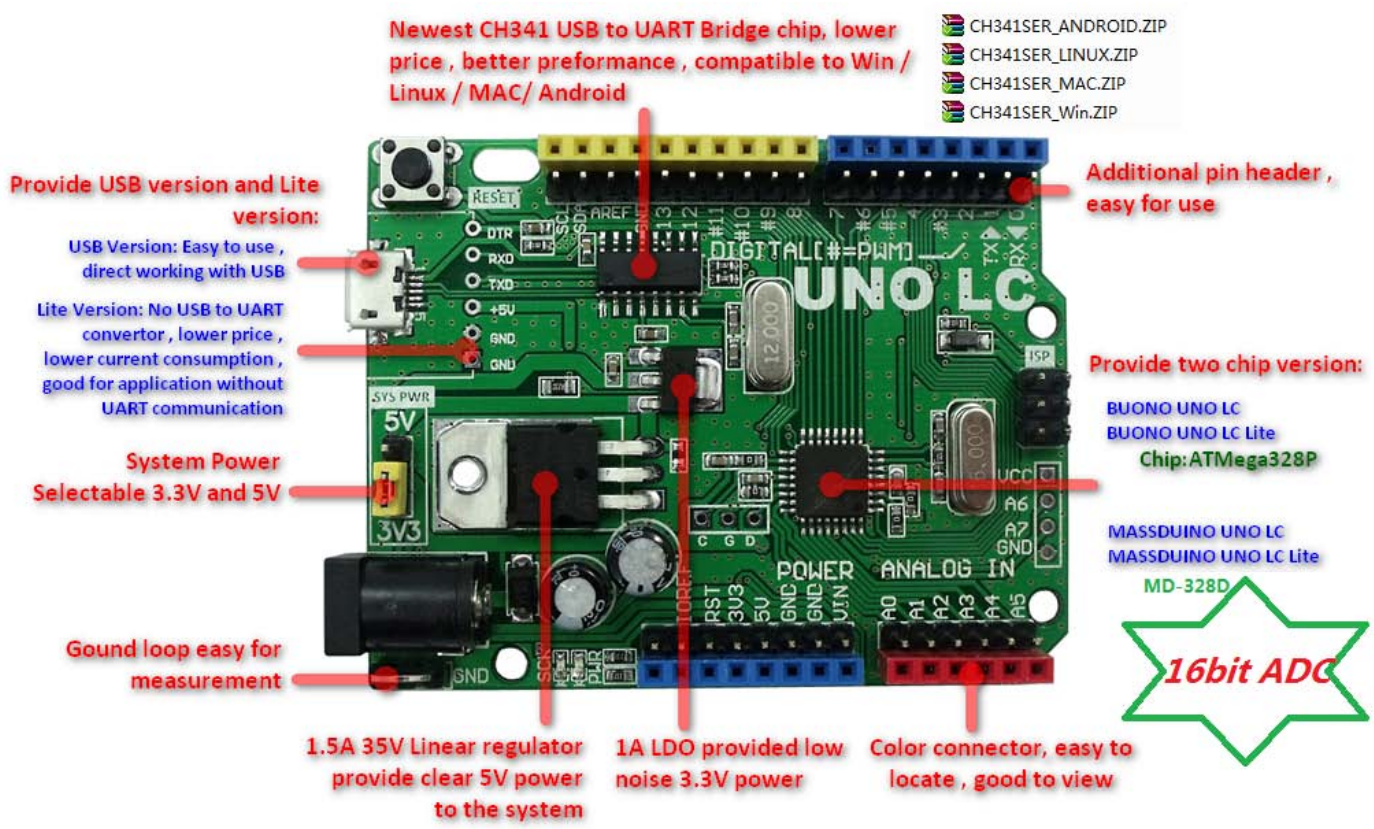
INHAOS™ Everything done inhouse

Overview

BUONO UNO LC is an Arduino compatible board, It's based on Arduino UNO R3 design, So you can use UNO LC as Arduino UNO, All Code, shield and IDE for Arduino UNO R3 are also valid on UNO LC, Some visible improvement on hardware make BUONO more flexible and easier use , For example: 3.3V or 5V IO selectable allow you connect some 3.3V modules (such as XBee) to BUONO directly.

MassDuino UNO LC use MD328D which high compatible with ATmega328P, The MD328P have better ADC resolution and lower power consumption.

Made Mass Production with Arduino, that's why we have MassDuino series product.



Parameter

Microcontroller	ATmega328P or MD328D
Operating Voltage	5V or 3.3V
Input Voltage (recommended)	7-12V
Input Voltage (limit)	6-35V
Digital I/O Pins	14 (of which 6 provide PWM output)
PWM Digital I/O Pins	6
Analog Input Pins	6
DC Current per I/O Pin	20 mA
DC Current for 5V Pin	880mA (See Notice)
DC Current for 3.3V Pin	**600 mA**
Flash Memory	32 KB (ATmega328P)
	of which 0.5 KB used by bootloader
SRAM	2 KB (ATmega328P)
EEPROM	1 KB (ATmega328P)
Clock Speed	16 MHz
Length	68.6 mm
Width	53.4 mm

Notice

The 5V Current limit is depended on the voltage difference between input and output , the regulator power consumption can be calculated below:

Pcm = (Vin - Vout) * Icm

In UNO LC's design , the Pcm must limit within 3.5W , so if the Input voltage is 9V , the voltage difference is 9V-5V = 4V , to limit Pcm within 3.5W , the current consumption must limit within 3.5V/4V = 0.875A.

The 3.3V max current consumption must limit within 600mA.

Again , the 3.3V LDO is serial to 5V regulator, to calculated 5V power consumption , must consider the 3.3V current consumption.

If you have any question about the power consumption , please contact us:
support@inhaos.com

Technical specs

No.	Items	BUONO UNO LC	BUONO UNO LC Lite	MassDuino UNO LC	MassDuino UNO LC Lite
1	Microcontroller	ATmega328P	ATmega328P	MD328D	MD328D
2	Operation Voltage	3.3V or 5V	3.3V or 5V	3.3V or 5V	3.3V or 5V
3	Input Voltage (recommended)	7-24V	7-24V	7-24V	7-24V
4	Digital I/O Pins	14 (of which 6 provide PWM output)	14 (of which 6 provide PWM output)	14 (of which 6 provide PWM output)	14 (of which 6 provide PWM output)
5	Analog Input Pins	8 (A6/A7 in Extend)	8 (A6/A7 in Extend)	8 (A6/A7 in Extend)	8 (A6/A7 in Extend)
6	ADC Resolutions	10 bit	10 bit	10 bit	10 bit
7	Flash Memory	32 KB of which 0.5 KB used by bootloader	32 KB of which 0.5 KB used by bootloader	32 KB of which 1 KB used by bootloader	32 KB of which 1 KB used by bootloader
8	SRAM	2KB	2KB	2KB	2KB
9	EEPROM	1KB	1KB	1KB Share with Flash Memory	1KB Share with Flash Memory
10	Clock Speed	16MHz	16MHz	16MHz	16MHz
11	Interface	Micro USB (CH341)	6Pin UART Serial Light	Micro USB (CH341)	6Pin UART Serial Light
12	Picture				
13	Main Advantage	USB UART interface ATmega328P Chipset Good cost performance Line Regulator, low noise	6Pin USB2Serial Light ATmega328P Chipset Very Good cost performance Line Regulator, low noise	USB UART interface MD328D Chipset 10Bit ADC Very Good cost performance USB UART interface Ready for mass production	6Pin USB2Serial Light MD328D Chipset 10Bit ADC Very Good cost performance USB UART interface Ready for mass production

Notes: To used MassDuino , Please go to www.inhaos.com download the MassDuino for Arduino driver.
We Sale MD328D Chip with very good price, please contact support@inhaos.com.

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