

Column1	Microcontroller	Arduino Uno Rev3	Rasp Pi 3 ver B	Arduino 101	Arduino Leonardo
Criteria	Importance (1-5)	(1,0,-1)	(1,0,-1)	(1,0,-1)	(1,0,-1)
Cost < \$30	2	1	1	-1	1
Battery Power	5	1	1	1	1
Avaliability	3	1	1	1	0
Security	1	0	0	0	0
Input/Output Pin: atleast 14	5	1	1	1	1
Language C/C++	5	1	-1	1	1
Built in A/D D/A converters	1	1	1	1	1
Built in Display	2	0	0	0	0
USB/Video/Keyboard Ports	2	1	1	1	1
	Total	23	13	19	20

Sensor Name	In / Out?	Number?
Temp Sensor	Input	2
Emergency Shutoff	Input	1
Seat Pressure Sensor	Input	1
Temperature Adjustment	Input	2
Temperature Reading (visual)	Output	1
Temperature Setting (visual)	Output	1
Temperature Setting (to seat heater)	Output	1
Temperature Setting (to Vent sys)	Output	1
Battery Life Sensor	Input	1

or more

Total
11

Or more

<b>Name</b>	Arduinio Uno R3	Arduino 101	Arduino Leonardo
<b>Price</b>	23.38	30	19.8
<b>Microcontroller</b>	ATmega328P	Intel Curie	ATmega32u4
<b>Operating Voltage</b>	5V	3.3V (5V tolerant I/O)	5V
<b>Input Voltage (recommended)</b>	7-12V	7-12V	7-12V
<b>Input Voltage (limit)</b>	6-20V	7-17V	6-20V
<b>Digital I/O Pins</b>	14 (of which 6 provide PWM output)	14 (of which 4 provide PWM output)	20
<b>PWM Digital I/O Pins</b>	6	4	7
<b>Analog Input Pins</b>	6	6	12
<b>DC Current per I/O Pin</b>	20 mA	20 mA	40 mA
<b>DC Current for 3.3V Pin</b>	50 mA		50 mA
<b>Flash Memory</b>	32 KB (ATmega328P) of which 0.5 KB used by bootloader	196 kB	32 KB (ATmega32u4) of which 4 KB used by bootloader
<b>SRAM</b>	2 KB (ATmega328P)	24 kB	2.5 KB (ATmega32u4)
<b>EEPROM</b>	1 KB (ATmega328P)		1 KB (ATmega32u4)
<b>Clock Speed</b>	16 MHz	32MHz	16 MHz
<b>LED_BUILTIN</b>	13	13	
<b>Length</b>	68.6 mm	68.6 mm	68.6 mm
<b>Width</b>	53.4 mm	53.4 mm	53.3 mm
<b>Weight</b>	25 g	34 gr.	20 g
<b>Software?</b>	Arduino IDE	Arduino IDE	Arduino IDE
<b>Language</b>	C/C++	C/C++	C/C++
<b>Features</b>		Bluetooth LE, 6-axis accelerometer/gyro	

Pros	Cons
	Cost (paying for convenience of all parts pre assembled and pre programmed.)
Ease of use	
Ready to use out of box	
Large database of example code/ shared projects	
Automatic Unit conversion	