

Internet of Things Workshop – Hardware Buyer’s Guide

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	Arduino Uno + Ethernet shield	Netduino Plus	BeagleBone
Recommended OS for development	Windows, Mac OSX, Linux	Windows	Any
Development environment (IDE)	Arduino IDE (easy to use, but no debugger)	Visual Studio 2010 (Express)	Cloud 9 IDE (runs in your Web browser)
Programming language	C, Java-like (Processing)	C# (.NET Micro Framework)	Javascript (Node.js)
Processor / Speed	8-bit / 16 MHz	32-bit ARM7 / 48 MHz	32-bit ARM A8 / 500+ MHz
RAM / Flash	1 KB / 16 KB	28 KB / 64 KB	256 MB / 4+ GB
Strength	Tons of examples and libraries, sensor wiring examples	Low cost, Arduino shield compatible, professional IDE	Runs ARM Linux, huge amounts of memory, USB host
Weakness	Limited memory	Windows only development	GPIO library still in development
Cost including USB cable and power supply, but without shipping, customs	\$ 30 + 45 + 4 + 7 = 86	\$ 60 + 4 + 7 = 71	\$ 89 + 10 = 99

Specifications

- [Arduino Uno spec](#)
- [Netduino Plus spec](#)
- [BeagleBoard spec](#)

Adafruit product links

- [Arduino Uno](#)
- [Arduino USB cable](#)
- [Arduino Ethernet shield](#)
- [Arduino / Netduino power supply](#)
- [Netduino Plus](#)
- [Netduino USB cable](#)
- [BeagleBone + USB cable](#)
- [BeagleBone Power supply](#)



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