

## Can Android+Arduino Accelerate The Global Electronics DIY Revolution?

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	Samsung Galaxy SII + SensoDuino app*	Arduino Uno	Arduino Due	Raspberry Pi (B)
<b>Microcontroller</b>	ARM 1.2GHz Quad Core 32-bit	MIPS 16Mhz, 8-bit	ARM 84Mhz, 32-bit	ARM 700Mhz, 32-bit
<b>GPS</b>	Mali-400MP	NA	NA	VideoCore IV
<b>RAM</b>	1 GB	2 KB SRAM, 32 Flash, 1K EPROM	96 KB SRAM 512, KB Flash	512 MB RAM
<b>Unit Cost</b>	\$250	\$30	\$55	\$40
<b>GPS</b>	Yes	\$45	\$45	\$45
<b>WiFi</b>	Yes	\$35	\$35	\$10
<b>Bluetooth</b>	Yes	\$20	\$20	\$5
<b>Ethernet</b>	(via WiFi)	\$25	\$25	Yes
<b>SD Socket</b>	Yes	\$5	\$5	Yes
<b>SD Memory</b>	16GB	\$5	\$5	\$5
<b>Camera</b>	Yes	\$50	\$50	\$30
<b>Mic</b>	Yes	\$5	\$5	\$5
<b>Speakers</b>	Yes	\$5	\$5	\$5
<b>Audio Rec/Player</b>	Yes	\$25	\$25	Yes
<b>Video Rec/Player</b>	Yes	\$50	\$50	Yes
<b>Video out</b>	\$15	NA	NA	Yes
<b>Gyro</b>	Yes	\$15	\$15	\$15
<b>Accelerometer</b>	Yes	\$15	\$15	\$15
<b>GSM\GPRS\EDGE</b>	Yes	\$50	\$50	\$50
<b>Light sensor</b>	Yes	\$5	\$5	\$5
<b>Compass</b>	Yes	\$15	\$15	\$15
<b>Battery + charger</b>	Yes	\$25	\$25	\$25
<b>Display</b>	Yes	PC monitor	PC monitor	PC monitor
<b>Touch screen</b>	Yes	\$60	\$60	\$85
<b>Real Time Clock</b>	Yes	\$5	\$5	\$5
<b>FM Radio</b>	Yes	\$20	\$20	\$20
<b>Free IDE</b>	Yes	Yes	Yes	Yes
<b>Support Ecosystem</b>	Yes	Yes	Yes	Yes
<b>Portable</b>	Yes	Yes	Yes	Yes
<b>Arduino</b>	\$25	Yes	Yes	\$25
<b>TOTAL **</b>	<b>\$290</b>	<b>\$510</b>	<b>\$535</b>	<b>\$405</b>

\* SensoDuino is a free Android app on Google Play that harvests over a dozen phone sensors then streams their data to any device with Bluetooth such as Arduino and the HC-05 module

\*\* In some countries, shipping costs, customs tariffs, and sales taxes can be as high as 100% of item cost.