

# Digital ART and SCIENCE

*Inexpensive hardware for artistry (and more!) on a budget*

After the Raspberry Pi, more low-cost, low-power computers are coming to attention. We looked at some of them.

Turns out there are a lot of these things out there. Quite a few predating the Pi. We got our hands on what we could and tried them out. We installed either Debian or Ubuntu Linux then ran through a series of benchmarks.

The full review is available online at <http://pi.gate.ac.uk/>

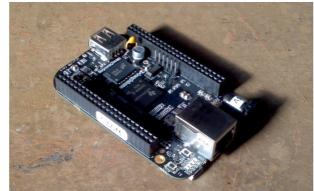
Great.

What can I do with them?

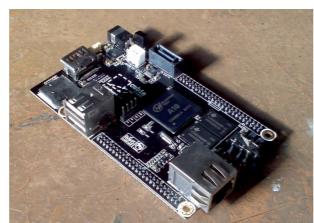
A wide variety of free and open software exists supporting digital art and science. Let's take a look...



800 MHz ARMv6, 512 MB RAM. \$49.



1 GHz ARMv7, 512 MB RAM. \$45.



1 GHz ARMv7, 512 MB RAM. \$49.



1.2 GHz ARMv5, 512 MB RAM. \$149.



The GNU Image Manipulation Program. Name says it all. Draw to your heart's desire.



Audacity: Free Audio Editor and Recorder. Also available to music students here!



Linux

## APC8750

Big. Lots of ports. VGA output is a nice touch. Pretty snappy response when using it. Kind of a desktop replacement in the end. Me? I'd put it in the kitchen for listening to music.



1 GHz ARMv7, 1 GB RAM. \$59.



700 MHz ARMv6, 512 MB RAM. \$35.



700 MHz ARMv6, 256 MB RAM. \$25.



800 MHz ARMv5, 512 MB RAM. \$119.

## MK802+ Mini PC

For every computer that's huge there's one that's tiny. This is it. Probably the best responsiveness out of any system tested. Tiny comes at a price though, there's a huge power brick.

## Pi Model B

What to say about what's in my mind already a classic? The best bit of Raspberry Pi is community. Meet up with other locals interested at a Raspberry Jam. Walk down to Maplin and buy one. It's hard to beat.

## Pi Model A

The hardware hacker's Raspberry Pi. Lower power and fewer ports. If you really need those ports it's cheaper to get a model B, but otherwise the A is its smaller cousin.

## TonidoPlug2

This is really an appliance and in Piano black looks it. It takes a SATA hard drive and is a NAS. That you can install your own software onto. Beware though - there's nothing but SATA, USB, and Wi-fi.



## Firefox

Mozilla Firefox Web Browser. Based on Netscape. Remember that?



## LibreOffice

LibreOffice from the Document Foundation. A complete office suite, based on Sun's StarOffice.



## Android



## Inkscape

Inkscape: Draw Freely. Vector (scalable) graphics. This poster was made with this!



## Python

Python Programming Language. A simple but powerful way to work.



## Processing

Visual arts programming. Used here at the university in the Music department!



## Octave

GNU Octave. An advanced interactive calculator.



## Ubuntu