



## Useful engineering information from Sphere Research Corporation

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# PCB CAD / EDA Software and where to get it.....

Fortunately for cash-strapped engineering students, most commercial packages have demo versions of the real software, or are completely free open source software. Keep in mind, the critical issue is the **WORK**, not the **TOOL**. If you understand the ideas, you can learn any package, although each tool has its own internal capabilities, issues and quirks to master.

Here are some of the major **paid packages** in use today:

# Altium



**Altium Designer** from Altium, see:

<http://www.altium.com/en/products/downloads>

Evaluate:

<http://www.altium.com/free-trial>

Also, they own the legacy apps, **P-cad**, **Protel** and **Easytrax**, see them here:

<http://techdocs.altium.com/display/ALEG/Legacy+Downloads>

# orcad

a Cadence product family



**OrCAD** from Cadence, see:

<http://www.orcad.com/>

Evaluate:

<http://www.orcad.com/buy/try-orcad-for-free>



**EAGLE**<sup>®</sup>  
www.cadsoft.de



**Eagle** from CadSoft, see:

<http://www.cadsoftusa.com/eagle-pcb-design-software/about-eagle/>

Evaluate (freeware version):

<http://www.cadsoftusa.com/download-eagle/freeware/>

# pads

personal automated design system



**Pads** from Mentor Graphics, see:

<http://www.mentor.com/pcb/pads/>

Evaluate:

<http://www.pads.com/try.html?pid=mentor>

Here are key **Open-Source Free** PCB CAD packages:



**KiCad**, see:

<http://www.kicad-pcb.org/display/KICAD/KiCad+EDA+Software+Suite>

key packages: Eeschema, PCBnew, Gerbview

Works on all platforms.



**DESIGNSPARK**, see:

<http://www.rs-online.com/designspark/electronics/>

They also have a free mechanical design package.

Linux operation using WINE and Mac operation using Crossover or Play On Mac is noted as possible, but not directly supported.



**PCB123** is from Sunstone Circuits, see:

<http://www.sunstone.com/>

note: optimized to feed board production by Sunstone, does not produce universal gerber files, but they can supposedly be had after production.



**Expresspcb** from Expresspcb, see:

<http://www.expresspcb.com/>

note: optimized to feed board production at expresspcb. Includes automatic quotation, ordering and billing.



**DipTrace** (paid) has a freeware non-profit use only package with limited functionality (300 pins, 2 layers), see:

<http://www.diptrace.com/downloads/download-diptrace/>

Now also available for Linux and OSX.



**EDA** = Electronic Design Automation

**PCB** = Printed Circuit Board

**CAD** = Computer Assisted Design

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