

Re: Suggestions on harvesting components.

Re: Suggestions on harvesting components.

Source: <http://sci.tech-archive.net/Archive/sci.electronics.components/2009-02/msg00059.html>

- *From:* matthew.hiles@xxxxxxxxxx
 - *Date:* Fri, 27 Feb 2009 04:16:09 -0800 (PST)
-

On Feb 26, 2:18 pm, Franc Zabkar <fzab...@xxxxxxxxxxxxxxxxxxxxx> wrote:

On Thu, 26 Feb 2009 04:59:46 -0800 (PST), matthew.hi...@xxxxxxxxxx put finger to keyboard and composed:

Hello sci.electronics.components,

So I a hobby tinkerer. I'd love to do more and make more, but the cost of electrical components is prohibitively expensive for me. I have had success in the past using old or broken electronics for their parts (a transformer here, a capacitor there).

I was wondering if we could get a list going of from where and from what to harvest components.

It's not just components that you should be looking out for. Sometimes entire modules can be useful.

For example, you can use a hacksaw to cut out the Vcore regulator from old socket 7 motherboards. This gives you a high current 2.0V - 4.0V jumper selectable supply which can be powered from a 12V source, eg a car cigarette lighter.

Old mobile phone car adapters, eg those using an MC34063 PWM controller, can also provide 500mA at various voltages, if the sense resistors are reprogrammed. I'm using one to reduce the 12V rail in a DVD player to 7V in order to supply a cooling fan which I have added for reliability reasons.

<http://us1.webpublications.com.au/static/images/articles/i1041/104164...http://us1.webpublications.com.au/stat>

Old DVD players may have useful switchmode PSUs which produce 5V and 12V.

Re: Suggestions on harvesting components.

Old AT/ATX PSUs can be converted into +13.8V high current supplies for car audio, ham radio, CB, etc. One only needs to change two voltage sense resistors, and possibly one overvoltage sensing zener. You may also require a dummy load resistor on the unused +5V rail.

The following mods are more sophisticated and involve rewinding the switchmode transformer.

A Dirt-Cheap, High Current Power

Supply:http://www.siliconchip.com.au/cms/A_30705/article.html

Regulated High-Voltage Supply For Valve

Amplifiers:http://www.siliconchip.com.au/cms/A_102096/article.html

Your microwave's controller PCB and keyboard makes an excellent digital timer, eg for a dark

room:http://www.siliconchip.com.au/cms/A_30659/article.html<http://us1.webpublications.com.au/static/image>

For example, in my tinkering I have found that broken microwave ovens are an excellent source for large, high voltage transformers.

Also comes to mind: high farad electrolytic capacitors from disposable cameras. Old, non-disposable cameras with built in flash can often be purchased for less than \$2 at second hand stores (for a 500k uF capacitor, that's a very good deal).

My current project requires relays (electromechanical or SSR). Does anyone have any suggestions from what to harvest relays?

- controller PCB in microwave ovens
- some TVs (standby power switching)
- older dialup modems, fax machine (electromechanical hook relay, some have SSR)
- audio amps (speaker outputs, de-thump/protection relay)

There used to be a regular "Salvage It" column in Silicon Chip

Magazine:<http://www.siliconchip.com.au/cms/search/index.html?scope=&keywords=s...>

The articles are pay-to-view, but the "printer friendly versions" can give you some useful info and photos.

- Franc Zabkar

--

Please remove one 'i' from my address when replying by email.

Re: Suggestions on harvesting components.

Re: Suggestions on harvesting components.

Thank you, this was very helpful. I admit to having used the old ATX PSU as a DC power supply for other projects. I never thought of hacksawing modules out of old PCBs/MoBos before though (soldering had crossed my mind but always seemed like too much work for the goods).

.