

Matthew Nuzum

Hello Vern,

I just wanted to toss my suggestion in for the design challenge. I found a couple good deals that would outfit a workbench nicely. First, my reasoning:

You said entry level. That means someone probably doesn't have a lot of tools yet, so I included the essential tools. Also, since the cost is under \$100 I couldn't get the super deluxe life-time warranty tools. I know in my own workshop I often start out with inexpensive tools and replace the ones I wear out with high quality ones.

Also, I feel like the wave of the future is embedded electronics, so I wanted to make sure the person outfitting their bench would be immediately productive so a PIC or AVR programmer is included.

PN#/URL	Description	Vendor	Price	Total
<a href="#">WB-104-1+J</a>	Solderless Breadboard w/Jumper Wires	Circuit Specialists Inc	\$14.89	\$14.89
<a href="#">CSI-STATION1A</a>	Deluxe Soldering Station w/Analog Display	Circuit Specialists Inc	\$39.95	\$39.95
<a href="#">ZD180-2MM</a>	Desoldering Braid	Circuit Specialists Inc	\$0.99	\$0.99
<a href="#">CAT# TS-72</a>	SOLDER 6 FT	AllElectronics	\$1.00	\$1.00
<a href="#">CAT# SP-44</a>	SOLDERING PASTE FLUX 2 OZ	AllElectronics	\$5.00	\$5.00
<a href="#">CAT# MTC-5</a>	2" MINI-HOOK JUMPERS (5 PACK)	AllElectronics	\$6.00	\$6.00
<a href="#">CAT# PS-148</a>	POWER SUPPLY 5.1V/12A 12V/2.5A -12V/2.5A	AllElectronics	\$7.50	\$7.50
<a href="#">CSIMS8264</a>	Multi-Function DMM	Circuit Specialists Inc	\$0.00	\$0.00
<a href="#">HH118079</a>	HELPING HAND W/ MAGNIFIER	Circuit Specialists Inc	\$3.49	\$3.49
<a href="#">SKU#: TOL-00070</a>	Diagonal Cutters	SparkFun	\$2.95	\$2.95
<a href="#">SKU#: TOL-08696</a>	Wire Strippers 30AWG	SparkFun	\$3.95	\$3.95
<a href="#">PGM-00014/08</a>	PIC or AVR Programmer	SparkFun	\$13.95	\$13.95
			<b>Total:</b>	<b>\$99.67</b>

Here's what I like: I feel the power supply is a good find. + and - 12v is great for doing analog work. It's a nice, high current unit and it has built in +5v as well.

The soldering station is a nice adjustable unit with a stand, a temp readout and a tip cleaner.

By getting the breadboard and the soldering iron together we qualify for Circuit Specialists' free multimeter which looks like a nice simple multimeter, similar to the one I used for years as a student and hobbyist.

Finally, all of the above was done with enough left over to buy a PIC programmer. The same one I have myself. :-)

So if I had a little more money to spend I'd go with a nicer DMM I think. I couldn't find any vendors that offered USB PIC programmers anywhere near the cost of the simple serial programmer listed above but you can get them on ebay for just slightly more, so that might be another good upgrade.