# **"WHERE DO I GO TO BUY ELECTRONIC GOODIES?"**

APPENDIX K

Good question! Here are some hints, from our experiences.

## I. Mail order and online

**Digi-Key Corp** (Thief River Falls, MN: 1–800–digikey). We used to say "*Get their catalog!!*" – but, sadly, they've abandoned paper, replacing it with an impressive search capability. You can get everything here, even in small quantities, with fast delivery. It's often worth designing with their webpage open in front of you. Online ordering and stock/price checking: www.digikey.com.

**Mouser Electronics** (www.mouser.com). Broad stocking distributor, with service comparable to Digi-Key's, and willingness to ship small quantities. Good selection of precision passives; and they are still printing a comprehensive paper catalog.

**Newark Electronics + Farnell** (1–800–2–newark; www.newark.com). Broadest stocking distributor, with service comparable to Digi-Key's and good selection of tools; paper catalog still in print.

**"Stocking Distributors".** These are the standard distribution channel for quantity buying; names like Allied (still publishing a paper catalog), Arrow, Avnet, FAI, Heilind, Insight, Pioneer, Wyle. Substantial minimum quantities – not generally useful for prototyping or small production.

**Manufacturers' Direct.** Many semiconductor manufacturers (Analog Devices, TI, Maxim,...) will not only send free samples with the slightest provocation, they will also sell in small quantities via credit card; check out Mini-Circuits for RF components, and Coilcraft for inductors, transformers, and RF filters.

**Oddballs.** Marlin P Jones, Jameco, B&D, Herbach & Rademan, Omnitron, ABRA, All Electronics; ephemeral collection of "surplus" stuff, some real bargains.

**eBay** (www.ebay.com). If you haven't been here, you've probably just arrived from Mars. LOTS of stuff, literally millions of items, an online auction. You can get plenty of

electronic stuff, but CAVEAT BIGTIME EMPTOR. Feedback Forum helps.

**Alibaba** Small Pacific-rim companies that have stocks of obsolete components are easily found on Alibaba. You can place a quote request for a part number, and you'll get dozens of useful reasonably-priced suppliers.

#### **II. Indexes and Locators**

**Octopart, FindChips, NetComponents** (octopart.com, findchips.com, netcomponents.com). Give it a part number and it searches dozens of distributors, returning (sometimes unreliable) information on availability and pricing.

**WhoMakesit** (www.whomakesit.com). A bit like the EEM catalog, helpful if you know the category of stuff you want, but not the manufacturer, etc.

**Google** (www.google.com). Our standard "portal," reads your mind and vectors you to the goodstuff. Helpful, sometimes, in finding parts and equipment manufacturers and vendors.

#### III. Local

Sometimes it's nice to shop in person; here are the sorts of places to go.

**Radio Shack** (www.radioshack.com). They call themselves "America's Electronic Supermarket"; we'd call them "America's Electronic Convenience Store." Their stores are everywhere, and they stock (pretty reliably) an idiosyncratic collection of parts and supplies, of uncertain quality or duration. However, in the changing marketplace of consumer electronics, their future path is unclear.

**Electronics Flea Markets.** Also known as "swap meets," perhaps somewhat in decline; two legendary meets are on opposite coasts: De Anza College (Cupertino, every second Saturday, March–October), and MIT (Cambridge, every third Sunday, April–October). What meets

## Art of Electronics Third Edition

1151

are three cultures (electronics, computers, hams); haggling is mandatory; caveat very emptor.

**Electronics Surplus Supply Stores.** These are incredibly cool! Several well-known haunts are Halted (www.halted.com; officially "HSC Electronics Supply"), in Santa Clara, Sacramento, and Santa Rosa; and Murphy's Surplus Warehouse (www.murphyjunk.bizland.com) in El Cajon.

### **IV. Miscellaneous**

Obsolete ICs. Your best place to start is Rochester

Electronics (www.rocelec.com), a wonderful place that apparently buys up inventories of ICs being discontinued. Jameco also has a lot of obsolete parts. Freetradezone has broker lists for obsolete parts. Also try Interfet (www.interfet.com), a manufacturer of small-signal FETs, including ones that the big guys have abandoned.

**PC Board Manufacture.** We like a place called Advanced Circuits, www.4pcb.com; you can get online quotes, and they do a good job and deliver pronto. Another inexpensive and fast PC house is Alberta Printed Circuits in Canada (www.apcircuits.com).