



MICROCONTROLLER PROJECT LABORATORY

EDUCATIONAL STUDIES PROGRAM – HIGH SCHOOL STUDIES PROGRAM – SUMMER 2001
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

RECOMMENDATIONS

Books

Practical Electronics for Inventors, Paul Scherz, 600 pages, \$40

This book was recommended for my microcontroller class at MIT last spring. It has some theory at the start, and then has chapters on just about every type of electronic device. Browse in the store and see if it interests you.

Radio Shack: *Science and Communication Circuits and Projects*, Forrest M. Mims III, 140 pages, \$6

This is one of the series “Engineer’s Mini Notebook” from Radio Shack. I browsed through a few of these books looking for ideas for the class. It has a range of projects, from simple to advanced (it doesn’t require the microcontroller, though).

The Microcontroller Idea Book, Jan Axelson, 270 pages, \$30

Has some nice microcontroller ideas, but it uses a different microcontroller than ours, the 8052-BASIC. Still, if you’re interested in doing more, the 8052-BASIC may be better than our chip, and in case the book has some good ideas applicable to our chip.

Mail-Order

Digikey, www.digikey.com, 700-page catalog

The “everything” store. Takes some effort to find what you’re looking for; the catalog is easier than shopping on-line.

Electronix Express, www.elexp.com, 250-page catalog

Medium-sized mail order, in New Jersey (which means lower/faster shipping costs).

They have a good selection, including some fun-looking project kits. This is where I got the breadboards.

Hosfelt Electronics, www.hosfelt.com, 150-page catalog

Medium-sized mail order in Ohio. They have a lot of cheap power supplies, and a good selection of parts with nice pictures and descriptions.

BG Micro, www.bgmicro.com, 25-page catalog.

Texan-style electronics. They have a lot of cheap, nice parts, and their catalog is hilarious.

Request a 25-page catalog or shop on-line. Recommended.

Microcontrollers

I recommend *Pioneer Standard*, <http://www.ied.pios.com/>, and *Future Electronics*, www.futureelectronics.com.

I got the ‘RD2s from Pioneer; when they ran out I ordered ‘RC2s from Future.

Retail Stores

Active Electronics, 73 First St., Cambridge, MA 02141, 617-864-3588

They have electronics for sale in the store. More expensive than mail-order, but you pay no shipping.

Located across the street from the Cambridgeside Galleria Mall.