Mini Assignment 3 (Part 1)

Theme: List of Stamp Related Resources

Instructor: Dr. Venkat Krovi

Teaching Assistant: Chin-Pei Tang
MAE 576

MECHATRONICS

Mini Assignment -3

SUBMITTED BY:
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PERSON # 3031-4938
DATE:01/31/03
BOOKS

1. **Micro Application Cookbook** * The Microcontroller Application Cookbook is a wide-ranging collection of 113 interface circuits designed around the BASIC Stamp II.
2. Basic Stamp by Kuhnel and Zahnert. [http://www.wd5gnr.com/bstoc.htm](http://www.wd5gnr.com/bstoc.htm)
3. **Basic Stamp** - A pretty good book about Stamps (and the first one that was out). Pity there is no disk, and the translation is a bit rough in places. The first half is mostly review for anyone who has written any sort of Stamp program. But the back half is full of interesting projects (including motion detection, X10, networking, and more).
4. **Programming and Customizing the Basic Stamp Computer** - Scott Edwards is well-known in the Stamp world, especially to readers of Nuts & Volts where he used to write a column each month. This book is a little introductory -- if you have any experience with the Stamp, you'll probably skip right to the projects, which are pretty good.
5. **The Art of Electronics** - This is the best overall electronics book around. Nothing about Stamps per se, but absolutely everything you need to know about everything else.
6. **Microcontroller Projects with Basic Stamps** - Covers introductory material and advanced projects. A complete task-oriented Stamp command reference; covers BS1, BS2, BS2P, and BS2SX. Learn about advanced math, digital I/O, analog I/O, serial I/O, LCDs, keypads, motors, I/O expansion, and how to move to PIC or SX programming.

ONLINE COMPENDIA

3. **Al Williams Basic Stamp FAQ** - Very informative FAQ, you can also add your own.

MAKES/SELLS STAMP ACCESSORIES

1. [http://www.retron.com/PicBasic/stamp_stuff.htm](http://www.retron.com/PicBasic/stamp_stuff.htm)
2. **Parallax** - Makers of the Basic Stamp. What can i say great company!
3. **Stamps in Class** - Great new Site Made by Parallax. Good for begginers.
4. **Scott Edwards Electronics** - Produce LCD's, Servo controllers, LCD Accessories, etc.
5. **Solutions Cubed** - Produce add-ons for the Stamp. Pocket watch, motor driver, ram pack, etc.
6. **AWC** - Produce add-ons for the Stamp that increase Ram, addition I/0's, Math capabilities such floating point math and more.
7. **Tower Hobbies** - R/C stuff & servo motors.
8. **AWC** - Prototyping and coprocessors
9. **Arrick Robotics** - Mobile robot using the Basic Stamp
10. **SEETRON** - LCD Backbacks
11. **Solutions Cubed** - Serial RAM, clocks, motor controls
12. **Future Standard** - Stamp accessories, X-10 home automation gear
13. **Bill & Jack** - Walking robot kit
14. **Decade Engineering** - Decade makes the BOB-II that allows you to display characters on a TV screen!
15. **MicroEngineering Labs** - Basic Compiler
16. **Basic Micro** - Basic Compiler
17. **HVWTech** **HVW Technologies** - Serial LCD's, Motor Drivers, DIRRS, etc.

**PROJECTS**

1. [http://www.rentron.com/BasicStamp.htm](http://www.rentron.com/BasicStamp.htm)
   eg: **Infrared data communications**. This project shows how to build an infrared data communications system that lets your BASIC Stamps talk to each other over infrared light at up to 2400 baud. It's simple, it's excellent, and it's more fun than a barrel of Stamps..
2. [http://www.geocities.com/SiliconValley/Orchard/6633/projects.html](http://www.geocities.com/SiliconValley/Orchard/6633/projects.html)
   eg: Interfacing a 2 wire EEPROM to the Stamp: This project will show you how to interface one of Microchip's 24XXXX 2 wire EEPROM's to the Stamp.

**ONLINE TUTORIALS / FAQ**

2. BASIC Stamp integer math and related topics: [http://www.emesys.com/BS2index.htm](http://www.emesys.com/BS2index.htm)
3. **Enhanced math for the Basic Stamp 2** - An introduction to the Stamp2 32-bit routines
4. **The complete Mac / BASIC Stamp II page** - Complete guide to connecting your Stamp to your MAC.
OTHER BASIC STAMP SITES

1. The WeatherStamp Meteorological Station - Using a Stamp to make a Weather monitor, great page with lots of info on how to interface ADC’s, Real time clocks, shift registers, etc.
2. Mike’s Electronics Page - Various electronics projects that Mike has done over the years.
4. Vlad’s Site - Info on how to use a Stamp to communicate with a TI-82 calulator, robots and more.
5. Bob Blick’s Page - A bunch of projects including an H-bridge, and using a 555 timer as an ADC.
6. Tracy’s Basic Stamp Page - Very helpful page for learning stamp math, in includes doing logs, min, and max and much more with the stamp.
7. Mark’s Basic Stamp Page - A few Stamp project including a stepper motor interface.
8. BrokenBytes HomePage - Thinking of making a DTMP Decoder? This is the place to go.
9. J.D Richards Site - RS485 to BASIC Stamp II Interface Board
10. Brain’s WebPage - Simple QBASIC to BASIC Stamp II Serial Communication
11. Parkis Homepage - Using a Stamp for Caller ID.
12. DCF-Clock - Interfaces a dcf receiver module to a BASIC Stamp
13. A Radio-controlled Digital Clock - Displays time, day, year, and temperture.
14. Roger’s webpage - Build An Inexpensive Repeater Controller from a Basic Stamp.
15. Reynolds Electronics - Basic Stamp, 8051, or Pic Microcontroller, Schematics and Projects
16. KBOB’s Basic Stamp and PIC page - Basic Stamp projects, PIC Programming, and building a PIC programmer
Mechatronic Books

**Mechatronics: Electronic Control Systems in Mechanical Engineering (2nd Edition)**
by W. Bolton, et al

**Mechatronics**
by Dan S. Necsulescu

**Electromechanical Systems, Electric Machines, and Applied Mechatronics**
by Sergey Edward Lyshevski

**Mechatronics System Design**
by Devdas Shetty, Richard Kolk

**System Dynamics : Modeling and Simulation of Mechatronic Systems**
by Dean C. Karnopp (Author), et al

**Understanding Electro-Mechanical Engineering : An Introduction to Mechatronics**
by Lawrence J. Kamm

**Robotics, Mechatronics, and Artificial Intelligence: Experimental Circuit Blocks for Designers**
by Newton C. Braga

**Mechatronics: Mechanical System Interfacing**
by David M. Auslander, Carl J. Kempf

**Mechatronics and the Design of Intelligent Machines and Systems**
by D. A. Bradley (Editor), et al

**Mechatronics: Japan's Newest Threat (Advanced Industrial Technology Series)**
by V. Daniel Hunt
**Hobby shops selling Stamps**

- [http://www.lynxmotion.com/](http://www.lynxmotion.com/)

**Stamp Accessories**

- [http://www.apexvalue.com/basic_stamp_access.htm](http://www.apexvalue.com/basic_stamp_access.htm)
- [http://www.seetron.com/](http://www.seetron.com/)
- [http://www.phanderson.com/](http://www.phanderson.com/)

- Motor controller and Ultrasonic Ranger
- Serial LCDs
- Serial Temperature Monitors
- PC programs for capturing and visualizing data output from the BASIC Stamp
- Modules that offload tasks such as timekeeping and running motors from the main stamp processor
the fire-stick, an infrared remote link transmits and receives the state of 4 parallel bits

http://www.melabs.com/mel/home.htm

popular and well supported compiler that allows you to burn code written for the BASIC Stamp (PBASIC) into standard PIC microprocessors

http://www.elabinc.com/

Offers a series of interesting modules that offload tasks from the BASIC Stamp. These include LCD modules as well as drivers for serial printers, keyboards and a variety of other functions.

http://members.tripod.com/~divelec/

powerful motors and controllers with BASIC Stamp connection

http://www.decadenet.com/

Offer low-cost OSD (On-Screen Display) modules and other video function blocks for use by system designers

http://www.high-techgarage.com/

offers a "timekeeper" module that mounts under the BS2, so that it does not take any board area. The module uses an I2C bus to address a DS1307 RTC and up to 16kx8 eeprom. Additional products are in the works. Great tutorials too!

**Online Compendia of Stamp Applications**

Home Automation Solutions:  http://www.arwa-tech.com/electronics.htm


Complete weather station  http://www.weatherstamp.com/

Data loggers for specific biological application  http://www.uia.ac.be/bio/pleco/TECH/technical.html
MiniHW_3_Bhabhrawala

**Mechatronics**

**Mini Assignment 3**

Talib.S.Babhrawala- 2978 6208

### Books

**Programming &Customizing the BASIC Stamp Computer** - 2nd Ed.

http://www.melabs.com/products/books/bsbook.htm

**Basic Stamp**

Covers both the hardware and software sides of the Parallax BASIC Stamp 1 and 2 microprocessor operation and design. The BASIC Stamp is built on PIC microcontroller hardware and uses PBASIC as its programming language, which makes it simple to use, but versatile enough to solve professional problems.

http://www.amazon.com/exec/obidos/ASIN/0750672455/eg3communicationA/

**Microcontroller Application Cookbook**

The Microcontroller Application Cookbook is the beginner's sourcebook for real-world machine control. It features over 100 schematics and code samples based on the popular BASIC Stamp2 Microcontroller.

http://www.amazon.com/exec/obidos/ASIN/0615115527/eg3communicationA/

**Microcontroller Projects Using the Basic Stamp**

Updated with a complete, task-oriented command reference for the BS2P Stamp and detailed instructions for new projects including Internet-to-Stamp gateways, test instruments, infrared remote controls, and robot motor controls. Includes a Basic Stamp emulator, a tool to program PIC chips, and practical advice for PC interfacing using serial EEPROMs, analog I/O capabilities.

http://www.amazon.com/exec/obidos/ASIN/1578201012/eg3communicationA/

**Microcontroller Projects with Basic Stamps**

Are you an old-hand at microcontroller design? Seasoned designers accustomed to using more arcane microcontrollers will find that Basic Stamps are easy, productive and fun to use. You will find practical advice for PC interfacing, using EEPROMS and other devices, as well as a task-oriented command reference, and chapters that cover analog I/O, serial communications, and LCDs and keypads.

http://www.amazon.com/exec/obidos/ASIN/0879305878/Eg3communicationA/

**Programming and Customizing the Basic Stamp**

A book/CD-ROM tutorial on the BASIC Stamp single-board computer, which runs a PIC Microcontroller and doesn't require any assembly language programming. Offers a primer on basic electronics, and coverage of both BASIC Stamp I and II, from understanding BASIC programs to PBASIC toolboxes and applications.

http://www.amazon.com/exec/obidos/ASIN/0071371923/eg3communicationA/
Electronic Magazines

http://www.nutsvolts.com/

Retrofire.com Retrofire is dedicated to building better robots and more powerful rockets all with a mix of science and art! Active robotics web-newsletter.
http://www.retrofire.com/

LVR.com Serial Port Complete is a guide to designing, programming, installing, and troubleshooting computer links, including networks of multiple computers.
http://www.lvr.com/

HowStuffWorks.com How Stuff Works provides helpful information on programming the BASIC Stamp, creating a digital clock, thermometer, and more!
http://www.howstuffworks.com/microcontroller.htm

TUTORIALS

Basic Stamp Computer Tutorial
The Basic Stamp computer is a product of Parallax Incorporated. The Stamp manual provided by Parallax is often confusing and advanced for the person with no programming experience. This tutorial attempts to give the beginning programmer a little more detailed information about the function and use of the most common P-Basic commands used with the Stamp.
http://www.tjhsst.edu/~jleaf/tec/stamp/sttutor1.htm

Basic Stamp Tutorial
The Basic Stamp is a small microcontroller made by Parallax, Inc. which can be used for many simple prototyping and control applications. The Stamp understands a simplified variant of the BASIC programming language and programs are loaded into the Stamp from a PC via a cable that attaches to the PC parallel (printer) port.
http://www.me.umn.edu/resources/desres/stamp/

Serial Communication Tutorial
This tutorial deals with serial communication between the Stamp and other devices. The discussion presents some basics and illustrates how to interface the Stamp with a PC or other terminal device and how to interface with such serial devices as a serial LCD and our popular 8-channel temperature measurement unit.
http://www.phanderson.com/stamp/tutorial_10.htm
Basic Stamp Accessories Sites

**Stamps in Class** - Great new Site Made by Parallax. Good for beginners.
http://www.stampsinclass.com/

**Scott Edwards Electronics** - Produce LCD's, Servo controllers, LCD Accessories.
http://www.seetron.com/

**Solutions Cubed** - Produce add-ons for the Stamp. Pocket watch, motor driver, ram pack, etc.
http://www.solutions-cubed.com/

**AWC** - Produce add-ons for the Stamp that increase Ram, addition I/O's, Math capabilities such floating point math and more.

**HVW Technologies** - Serial LCD's, Motor Drivers, DIRRS, etc.
http://www.hvwtech.com/pages/default.asp

Basic Stamp Resources

**L.O.S.A** - List of Stamp Applications
http://www.hth.com/losa/

**Parallax Ftp Site** - Stamp Apps, Manual, and much more.

**Al Williams Basic Stamp FAQ** - Very informative FAQ, you can also add your own.
http://www wd5gnr.com/stampfaq.htm

**Shaun's Pages** - Shaun's BASIC Stamp pages provide a growing collection of application notes and technical tips.
http://www.geocities.com/SiliconValley/Orchard/6633/index.html

**BASIC Stamp Web Ring** - BASIC Stamp computers, PIC microcontrollers, and related embedded technologies
http://v.webring.com

**Brian Forbes**
This site describes Brian's most excellent book on the internal operation of the BASIC Stamp II. His book is a must have for the professional or for the advanced enthusiast.
http://members.aol.com/stamp2book

**Selmaware**
Home of Stamp Plot Lite (free) and Stamp Plot Pro (inexpensive), PC programs for capturing and visualizing data output from the BASIC Stamp. Uses simple Debug commands to direct and format the output. Also available is the BISCIT system, a means of controlling a stamp system with Active-X controls over the internet.
http://www.selmaware.com/
Hobby Shops

Tower Hobbies - R/C stuff & servo motors.
http://www.towerhobbies.com/

VENDORS

Technical Works
Technical Works is the home of the MockUp embeddable development boards for the Microchip PICmicro, Parallax Basic and Javelin Stamps, Ubicom (Scenix) SX, Basic Micro Atom 24, Micromint PicStic, and NetMedia BasicX microcontrollers. The MockUps are the most versatile development boards on the market and are the simplest way to get your microcontroller ideas working!
http://www.technicalworks.com/

Parallax, Inc.
Specializes in microcontroller hardware solutions and educational curriculum kits. Produces BASIC Stamp Microcontrollers which are small computers with a language set designed for interfacing to electronic circuits. Our most recent product addition is the BS2p24 and BS2p40.
http://www.parallaxinc.com/

Peter Anderson's Home Page
PC Parallel Port, PIC, BASIC Stamp, 68HC11 resources. NEW PIC16F87X Development Package with Serial in Circuit Debugger. Serial Cable, Main MPLAB ICD Board.
http://www.phanderson.com/

Rentron.com
Welcome to Rentron.com. Here you'll find a growing selection of projects, tutorials and products for the PicBasic Compilers, BASIC Stamp, Microchip PIC, 8051 microcontroller, remote control.
http://www.rentron.com/

Crownhill Associates
Quicker and easier than C or Assembler, this true compiler creates fast compact code that can be loaded directly into the popular PIC Microcontrollers. Full compatibility with the Parallax BASIC Stamp I and II modules allows use of the vast range of documentation and tried and tested code available from Parallax Inc and third party providers supporting the Parallax BASIC Stamp I and II modules.
http://www.picbasic.co.uk/

CSMicro Systems
http://www.csmicrosystems.com/

HWV Technologies Inc.
SumoBot: Autonomous Mini-Sumo class robot. With infrared sensors and built-in BASIC Stamp II.
http://www.hvwtech.com/
http://www.emesystems.com/BS2links.htm
Stamp Related Resources:

Books:

1. The Microcontroller Application Cook Book Volume 1 & Volume 2 -- Matt Gilliland;
2. Inside Basic Stamp II -- Brain Forbes;
3. Programming and Customizing the Basic Stamp -- Scott Edwards;
4. Stamp II Communications and Control Projects -- Tom Petruzzellis, Thomas Petruzzellis;
5. The Microcontroller Application Cookbook -- Matt Gilliland, Ken Gracey;
6. The Microcontroller Application Cookbook, Vol 2. with BASIC Stamp 2 Homework Board -- Matt Gilliland;
7. Microcontroller Projects Using the Basic Stamp 2nd Edition -- Al Williams;
8. Basic Stamp -- Claus Kuhnel, Klaus Zahnert;
9. The Basic Stamp 2 - Tutorial and Applications -- Peter H. Anderson;
10. Basic Stamp Data Book. Newnes Publishing; 1997;

Online Tutorials:

3. FAQ’s http://www.faq-pro.com/faq/index.php?faq=1
7. http://www.me.umn.edu

Online Resources/Articles:

5. http://groups.yahoo.com/group/basicstamps/
MiniHW_3_Boddu

Suppliers:


Accessories Purchase:


Information regarding Interfacing:


Miscellaneous sites:

1. KIT DÉVELOPPEMENT 8051: http://www.pro-conceptmdm.com/francais/prod_board.htm#
11. PIC Microcontroller and Basic Stamp : http://www.doc.ic.ac.uk/~ih/doc/pic/
Mini Assignment #3
List of Stamp-Related Resources

**BASIC Stamp Books:**

"The Nuts and Volts of BASIC Stamps" Volumes 1-3

BASIC Stamp, Second Edition

Microcontroller Application Cookbook

StampWorks

Programming and Customizing the BASIC Stamp Computer

Microcontroller Projects Using the BASIC Stamp

Online Compendia of Stamp Applications

http://www.hth.com/losa.htm -- Currently not working

Nuts & Volts Index of BASIC Stamp Apps

Parallax Customer Apps

http://www.tradetech.co.nz/basic%20stamp/applications.htm

http://www.emesystems.com/BS2links.htm

ChipCenter

Reynold’s Electronics

Stamps in Class

http://bmbiris.bmb.uga.edu/wampler/compcont/sld036.htm

Stamp Accessories & Retailers

Parallax

ApexValue
Mouser Electronics
Arwa Technologies
Stamps In Class
Robot Store
Trade Tech-
Dark Robot

Good Links (lists, etc.):

http://www.geocities.com/SiliconValley/Orchard/6633/started.html

Great link:  
http://dmoz.org/Science/Technology/Electronics/Reference/BASIC_Stamp/

http://www.geocities.com/SiliconValley/Orchard/6633/links.html

http://www.solutions-cubed.com/basicstamp.htm

Google Directory:  
http://directory.google.com/Top/Science/Technology/Electronics/Reference/BASIC_Stamp/

Weather Stamp Apps

http://www.pic-c.com/links/stamps.html
Books

From Parallax website:

- The Nuts and Volts of BASIC Stamps Book Volumes 1, 2, and 3 - written by Parallax Inc.
- How to Build Your Own Prize-Winning Robot - written by Ed Sobey
- BASIC Stamp, Second Edition – written by Claus Kühnel and Klaus Zahnert
- Microcontroller Projects Using the BASIC Stamp - written by Al Williams
- Microcontroller Application Cookbook - written by Matt Gilliland
- Robot Sumo: The Official Guide. – written by Pete Miles
- ---- there are many more listed -----

Online Compendia of Stamp Applications

http://www.parallax.com
http://www.emesystems.com/BS2links.htm
http://www.geocities.com/SiliconValley/Orchard/6633/links.html
http://groups.yahoo.com/group/basicstamps/
http://home.earthlink.net/~parkiss/
http://members.aol.com/jonwms/persint.html#stamp
http://www.geocities.com/siliconvalley/park/1302/robotz.htm

Collection of BS links
Collection of BS links
Yahoo message group.
A number of projects by Bob Blick.
Programs and modifications
Interesting apps ex. Games, light controls
BS controlled robot

Stamp Accessories

Examples:

<table>
<thead>
<tr>
<th>2 x 16 Serial Backlit LCD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can serve as output display for BS apps.</td>
</tr>
<tr>
<td><a href="http://www.arwa-tech.com/electronics.htm">http://www.arwa-tech.com/electronics.htm</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Serial Keypad and LCD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interface as a keypad for BS apps.</td>
</tr>
<tr>
<td><a href="http://www.arwa-tech.com/electronics.htm">http://www.arwa-tech.com/electronics.htm</a></td>
</tr>
</tbody>
</table>
X10 Lamp Module
Control regular lamps with a BS program
http://www.arwa-tech.com/electronics.htm

Pocket Watch B
Can provide a timebase for BS apps
http://www.parallaxinc.com/html_files/products/BS_Accessories/s3_mmb_pwb.asp

Motor Mind B
Can provide DC motor speed and directional control
http://www.parallaxinc.com/html_files/products/BS_Accessories/s3_mmb_pwb.asp

Many other accessories include things like:
Infrared Detectors
RF Modules
Video Transmitters/ Receivers/ Cameras
Servo Motors
The Stache which can transport up to 15 Basic Stamp programs for download in the field.
Temperature Probes
Speakers.

Hobby shops selling stamps
http://www.jcminventures.com
Robot kits some of which feature the BS
Lots of online places to buy BS’s but not many of them identify themselves as Hobby shops.
Hobby Shops
Jameco Electronics at http://www.jameco.com/
Digi-key.com http://www.digikey.com/
BG Micro http://www.bgmirco.com/
Electronic Express http://www.elexp.com/
All Electronics Corporation http://www.allcorp.com/
Circuit Specialists, Inc. internet catalog http://www.web-tronics.com/
MOUSER Electronics http://www.mouser.com/
Alltronics.com http://www.alltronics.com/
Dontronics http://www.dontronics.com/index.html
Radioshak http://www.radioshack.com/

Online Compendia
1. FIRST http://www.usfirst.org/
   (FIRST (For Inspiration and Recognition of Science and Technology) is the largest non-
   profit educational user of BASIC Stamps)
2. IC Master http://www.icmaster.com/
3. Web links for Educational Basic Stamp links is given at (online compendia of basic
   stamp applications) http://www.stampscinclass.com/html_files/links.htm
   The website also includes customer projects that are worked out with basic stamps.
   Book list for basic stamp is provided for sale purpose. The website got the basic
   stamp material.
4. Site made by parallax called http://www.stampscinclass.com/
7. Stamp Projects
   http://www.geocities.com/SiliconValley/Orchard/6633/projects.html
10. Nuts&Volts Magazine: Stamp Applications Columns
    http://www.nutsvolts.com/stmpindx.htm
11. Application Notes and Tips for Display products, contains Stamps-Related
12. Online PBASIC code samples and utilities:
    http://members.aol.com/jonwms/persint.html#stamp
14. List of Stamp Applications – great idea source
    www.hth.com/iosa
15. Tracy Allen’s Stamp resources – very technical
    www.emesystems.com/BS2index.htm

Stamp Accessories
4. ARWA Technologies incorporation http://www.arwa-tech.com/electronics.htm
5. Site made by parallax called http://www.stampscinclass.com/
7. Solutions3 http://www.solutions-cubed.com/
   (The web of “Solutions” is given with Articles previously published on Basic
   Stamps applications)
   (The site provides tutorial, support and software for the products)

**Books:**
1. What's a Microcontroller? Text, v1.9
   (How to install the BASIC Stamp in the Board of Education, using the breadboard, blinking an LED with a pushbutton.)
2. Microcontroller Projects with Basic Stamps By Al Williams
   Book details with purchase rate are given in the website: [http://www.al-williams.com/sbook.htm](http://www.al-williams.com/sbook.htm)
3. There are a collection electronic books on basic stamps at [http://www.retron.com/books.htm](http://www.retron.com/books.htm)
   like  
   a) Microcontroller Application Cookbook: which is is a wide-ranging collection of 113 interface circuits designed around the BASIC Stamp II.
   b) Microcontroller Application Cookbook Volume 2, By Matt Gilliland
   c) Experimenting with the PicBasic Pro Compiler, etc

**Journals**

**Book Resources**
**Stamp Related Recourses**

**Books-**
1. Robot Builder’s Bonanza by Gordon McComb
2. Microcontroller projects using the Basic Stamp- Al Williams
3. Sumo Bot- Build your own remote controlled Programmable Sumo Bot- Mike Predco, Ben Wirz
4. *The Microcontroller Application Cookbook: Volume 1 with Hardware and Code Samples Featuring the Basic Stamp 2*- Matt Gilliland
5. *PIC Microcontroller Project Book*- John Iovine
6. *Stamp II Project Book: 20 Communications Projects*- Thomas Petruzzellis
7. *Programming and Customizing the Basic Stamp*- Scott Edwards
8. *Microcontroller Application Cookbook: Featuring the Basic Stamp 2*- Matt Gilliland
9. *Basic Stamp: An Introduction to Microcontrollers*- Claus Kuhnel, Klaus Zahnert
10. *Programming PIC Microcontrollers with PICBASIC*- Chuck Hellebuyck

**Online Compendia of Stamp Applications**
1. [http://www wd5gnr com/stampfaq htm](http://www.wd5gnr.com/stampfaq.htm) - This is a stamp FAQ with lists of posting and programs
2. http://www.geocities.com/Silicon Valley/Orchard/6633/ - Although this is not a commercial site, it is well organized and
3. [Web Stamp](http://www.geocities.com/Silicon Valley/Orchard/6633/) - An archive of some Basic Stamp Applications.
4. [Stamps Archive](http://www.geocities.com/Silicon Valley/Orchard/6633/) - An archive of all the messages posted in the Basic Stamp Mailing list.
5. [Nuts & Volts Stamp applications](http://www.geocities.com/Silicon Valley/Orchard/6633/) - Another archive of Basic Stamp Apps.
6. [HTH Stamp Archive](http://www.geocities.com/Silicon Valley/Orchard/6633/) - Another Ftp Stamp app archive.
7. [L.O.S.A](http://www.geocities.com/Silicon Valley/Orchard/6633/) - List of Stamp Applications
8. [Parallax Ftp Site](http://www.geocities.com/Silicon Valley/Orchard/6633/) - Stamp Apps, Manual, and much more.
9. [Al Williams Basic Stamp FAQ](http://www.geocities.com/Silicon Valley/Orchard/6633/) - Very informative FAQ, you can also add your own.

**Stamp Accessories-** Electronic components etc. (Information pasted from Second site in the online Compendia Section.)
- [Jameco](http://www.geocities.com/Silicon Valley/Orchard/6633/) - Inexpensive, good selection of components and IC's. (free catalog)
- [Parallax](http://www.geocities.com/Silicon Valley/Orchard/6633/) - Makers of the Basic Stamp. What can I say great company!
- [Stamps in Class](http://www.geocities.com/Silicon Valley/Orchard/6633/) - Great new Site Made by Parallax. Good for begginers.
- [Scott Edwards Electronics](http://www.geocities.com/Silicon Valley/Orchard/6633/) - Produce LCD's, Servo controllers, LCD Accessories, etc.
- [Solutions Cubed](http://www.geocities.com/Silicon Valley/Orchard/6633/) - Produce add-ons for the Stamp. Pocket watch, motor driver, ram pack, etc.
- [AWC](http://www.geocities.com/Silicon Valley/Orchard/6633/) - Produce add-ons for the Stamp that increase Ram, addition I/0's, Math capabilities such floating point math and more.
HVV Technologies - Serial LCD's, Motor Drivers, DRRS, etc.

Hobby Shops selling Stamps-
Tower Hobbies - R/C stuff & servo motors.

Other Suitable Categories-

There are a number of people who I know that can be used as a source of information. For example during this course, Dr. Krovi can be considered as a source of information. Matt Szymanski will be another source for me after this course is finished. I also have a friend outside of work who is familiar with other types of microchips.
Mini Homework 3

BasicStamp Related Resources
<table>
<thead>
<tr>
<th>Books</th>
<th>Online Compendia</th>
<th>Stamp Accessories</th>
<th>Hobby Shop</th>
<th>Others</th>
</tr>
</thead>
</table>
MiniHW_3_Jadhav

Chetan Jadhav
Person # 30429541
## Resources for Basic Stamp

**Mechatronics**  
**Mini-assignment 3**  
Preeti Joshi : psjoshi@buffalo.edu  
www.acsu.buffalo.edu/~psjoshi

<table>
<thead>
<tr>
<th>#</th>
<th>Books</th>
<th>Author</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Basic Stamp Manual, version 2</td>
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<tr>
<td>2</td>
<td>The Nuts and Volts of BASIC Stamps Volume #3</td>
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</tr>
<tr>
<td>3</td>
<td>Microcontroller Application Cookbook</td>
<td>Matt Gilliland; October 2000; Woodglen</td>
</tr>
<tr>
<td>4</td>
<td>StampWorks Manual Version 1.2</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>BASIC Stamp Second Edition</td>
<td>Claus Kuhnel &amp; Klaus Zahnert</td>
</tr>
<tr>
<td>6</td>
<td>Programming and Customizing the Basic Stamp</td>
<td>Scott Edwards; March 2001; McGraw-Hill</td>
</tr>
<tr>
<td>7</td>
<td>Basic Stamp: An Introduction to Microcontrollers</td>
<td>Claus Kuhnel, Klaus Zahnert; 2nd Ed, July 2000; Newnes</td>
</tr>
<tr>
<td>8</td>
<td>Microcontroller Projects With Basic Stamps</td>
<td>Al Williams; October 1999; R &amp; D Books</td>
</tr>
<tr>
<td>9</td>
<td>Programming and Customizing the Basic Stamp Computer</td>
<td>Scott Edwards; March 1998; McGraw-Hill</td>
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<tr>
<td>10</td>
<td>The Basic Stamp 2 - Tutorial and Applications</td>
<td>Peter H. Anderson; February 1998; Peter H. Anderson</td>
</tr>
<tr>
<td>11</td>
<td>Basic Stamp: An Introduction to Microcontrollers</td>
<td>Claus Kuhnel, Klaus Zahnert; March 1997; Butterworth-Heinemann</td>
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</table>

### Online Compendia

<table>
<thead>
<tr>
<th>#</th>
<th>URL</th>
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<tr>
<td>1</td>
<td><a href="http://www.geocities.com/stampic/HATE">http://www.geocities.com/stampic/HATE</a> M_PROJECTS.HTM</td>
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<td>2</td>
<td><a href="http://www.geocities.com/stampic/HATE">http://www.geocities.com/stampic/HATE</a> M_PROJECTS.HTM</td>
<td>Basic Stamp Links and Information</td>
</tr>
<tr>
<td>3</td>
<td><a href="http://www.nutsvolts.com/stmpindex.htm">http://www.nutsvolts.com/stmpindex.htm</a></td>
<td>Stamp Applications</td>
</tr>
<tr>
<td>4</td>
<td><a href="http://www.hth.com/filelibrary/txtfiles/losa_.txt">http://www.hth.com/filelibrary/txtfiles/losa_.txt</a></td>
<td>LOSA</td>
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### Stamp Accessories

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<th>#</th>
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<tbody>
<tr>
<td>1</td>
<td><a href="http://www.parallaxinc.com/html_files/products/products_listing.htm">http://www.parallaxinc.com/html_files/products/products_listing.htm</a></td>
<td>Parallax</td>
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<td></td>
<td>Website Address</td>
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<td>---</td>
<td>-----------------------------------------------------</td>
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<td>3</td>
<td><a href="http://www.tradetech.co.nz/basic%20stamp/downloads.htm">http://www.tradetech.co.nz/basic%20stamp/downloads.htm</a></td>
<td>(Parallax Inc)</td>
</tr>
<tr>
<td>4</td>
<td><a href="http://www.stampsinclass.com/">http://www.stampsinclass.com/</a></td>
<td>Stamps in Class</td>
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<tr>
<td>5</td>
<td><a href="http://www.milinst.com/index.htm">http://www.milinst.com/index.htm</a></td>
<td>Milford accessories</td>
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<tr>
<td>6</td>
<td><a href="http://www.emesystems.com/">http://www.emesystems.com/</a></td>
<td>EME systems</td>
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<td></td>
<td><strong>Hobby Shops selling Stamps</strong></td>
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<td><a href="http://www.generation5.org/aisolutions/howto01.shtml">http://www.generation5.org/aisolutions/howto01.shtml</a></td>
<td>Generation 5</td>
</tr>
<tr>
<td>2</td>
<td><a href="http://www.phanderson.com/stamp/starter.html">http://www.phanderson.com/stamp/starter.html</a></td>
<td>Peter H. Anderson - Embedded Processor Control</td>
</tr>
<tr>
<td>3</td>
<td><a href="http://www.rentron.com/">http://www.rentron.com/</a></td>
<td>Reynolds Electronics</td>
</tr>
<tr>
<td>4</td>
<td><a href="http://www.hvwtech.com/pages/default.asp">http://www.hvwtech.com/pages/default.asp</a></td>
<td>HVW shops</td>
</tr>
<tr>
<td>5</td>
<td><a href="http://warburtontechnology.saffas.com/">http://warburtontechnology.saffas.com/</a></td>
<td>Warburton Technology</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.elproducts.com/">http://www.elproducts.com/</a></td>
<td>Chuch Hellebuyck's Electronic Products</td>
</tr>
</tbody>
</table>
Basic Stamp Books

- Programming and Customizing the BASIC Stamp Computer-2nd edition by Scott Edwards
- Microcontroller Projects with BASIC Stamps by Al Williams
- BASIC Stamp Second Edition by Claus Kühnel and Klaus Zahnert
- Les BASIC Stamp (in French!) by Christian Tavernier
- StampWorks Manual Version 1.1
Basic Stamp Applications

- Stamp vs PICs in Commercial Applications: [http://www.phanderson.com/stamp/commercial.html](http://www.phanderson.com/stamp/commercial.html)
- BASIC Stamp Applications: [http://www.tradetech.co.nz/basic%20stamp/applications.htm](http://www.tradetech.co.nz/basic%20stamp/applications.htm)
- Shaun’s Basic Stamp II Project’s: [http://www.geocities.com/SiliconValley/Orchard/6633/projects.html](http://www.geocities.com/SiliconValley/Orchard/6633/projects.html)
Basic Stamp Accessories

- Parallax BASIC STAMP Accessories:
  [Link](http://www.parallaxinc.com/html_files/downloads/downloads_accessories.htm)

- APEXValue BASIC STAMP Accessories:
  [Link](http://www.apexvalue.com/basic_stamp_access.htm)

- CVTech BASIC STAMP Accessories:
  [Link](http://www.cvtech.com.au/stampsinclass/price.htm#Basic%20Stamp)

- ARWA-Tech BASIC STAMP Accessories:
  [Link](http://www.arwa-tech.com/electronics.htm)

- Robot Store:
  [Link](http://www.robotstore.com/catalog/list.asp?cid=13)
Shops Selling Basic Stamp

- Robot Store: [http://www.robotstore.com](http://www.robotstore.com)
- GazBot Robotics: [http://www.gazbot.com](http://www.gazbot.com)
Resources for Basic Stamp

books

- The microcontroller application cookbook by matt gilliland, volume 1 and 2
- Programming and customizing the basic stamp by scott edwards
- The basic stamp 2 – tutorial and applications by peter H.Anderson
- Microcontroller projects with basic stamps by Al Williams
Online Compendia

http://www.geocities.com/SiliconValley/Orchard/6633/projects.html

http://www.bobblick.com/index.html

http://www.geocities.com/SiliconValley/Orchard/6633/projects.html

ftp://nutsvolts.com/stampaps/
Stamp Accessories

http://www.digikey.com/

http://www.dunfield.com/

http://www.steroidmicros.com/

http://www.iar.com/
Hobby Shop and Vendor web sites

http://www.towerhobbies.com/

http://www.grainger.com/

http://www.wirz.com/

http://www.maplin.co.uk/
IC manufacturers

• http://www.nsc.com/

• http://www.dalsemi.com/

• http://www.design-net.com/

• http://www.maxim-ic.com/
Stamp related books

<table>
<thead>
<tr>
<th>TITLE</th>
<th>AUTHOR</th>
<th>PUBLISHER</th>
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<tbody>
<tr>
<td>Programming and customizing the Basic Stamp</td>
<td>Scott Edwards</td>
<td>McGraw-Hill</td>
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<tr>
<td>Programming and customizing the Basic Stamp Computer</td>
<td>Scott Edwards</td>
<td>McGraw-Hill</td>
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<tr>
<td>The microcontroller application cookbook featuring the Basic Stamp 2</td>
<td>Matt Gilliland</td>
<td>WoodGlen Press</td>
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<td>Basic Stamp: An introduction to Microcontrollers</td>
<td>Klaus Zahnert, Claus Kuhnel</td>
<td>Butterworth-Heinemann</td>
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<td>Microcontroller Projects using the Basic Stamp</td>
<td>Al Williams</td>
<td>CMP Books</td>
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<tr>
<td>Basic Stamp Manual Version 2.0</td>
<td>Parallax Inc. Staff</td>
<td>Parallax Inc.</td>
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<td>Basic Stamp Collecting</td>
<td>George Register, LS Gattis, Louie Smith Gattis III</td>
<td>Cheetah Publishing</td>
</tr>
<tr>
<td>Basic Stamp Collecting for pathfinders: A youth enrichment skill</td>
<td>Jon Williams</td>
<td>Cheetah Publishing</td>
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<tr>
<td>Stampworks Manual Version 1.1</td>
<td>Jon Williams</td>
<td>Parallax Inc.</td>
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<td>Les Basic Stamp</td>
<td>Christian Tavernier</td>
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<tr>
<td>The Nuts and Bolts of Basic Stamps: Volume 1-3</td>
<td></td>
<td>Parallax Inc.</td>
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<tr>
<td>Basic Stamp 2p Commands, Features and Projects</td>
<td>Klaus Zahnert, Claus Kuhnel</td>
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<tr>
<td>Inside the Basic Stamp 2</td>
<td>Brian Forbes</td>
<td></td>
</tr>
</tbody>
</table>

Online Compendia of Stamp Applications

1) Nuts & Bolts Magazine: Index of Stamp Applications
   [http://www.nutsvolts.com/stmpindx.htm]

2) LOSA- List of Stamp Applications
   [http://www.hth.com/losa/]

3) Basic Stamp Applications
   [http://www.tradetech.co.nz/basic%20stamp/applications.htm]

4) Web Stamp
   [http://www.geocities.com/SiliconValley/Orchard/6633/links.html]

5) HTH Stamp Archive
   [http://www.hth.com/filelibrary/BS2-IC/]

6) Parallax FTP Site
   [ftp://ftp.parallaxinc.com/]

7) Parallax Basic Stamp 1 applications
   [http://www.dontronics.com/stamp.html#app]
Stamp Accessories

1) Parallax  http://www.parallax.com/
2) Stamps in Class  http://www.stampsinclass.com/
3) Nuts and Bolts Magazine  http://www.nutsvolts.com/
4) Scott Edwards Electronics  http://www.seetron.com/
5) Solutions Cubed  http://www.solutions-cubed.com/
7) HVW Technologies  http://www.hvwtech.com/pages/default.asp
8) Tower Hobbies  http://www.towerhobbies.com/
9) The WeatherStamp Meteorological Station  http://www.weatherstamp.com/
10) Mike’s Electronics Page  http://www3.ns.sympatico.ca/michael.rankin/
11) Peter Anderson’s Page  http://www.phanderson.com/
12) Vlad’s Site  http://hem2.passagen.se/jaksel/
13) Bob Blick’s page  http://www.bobblick.com/index.html
14) EME Systems  http://www.emesys.com/
15) Mark’s Homepage  http://www.mastincrosbie.com/mark
16) Enhanced Math for the Basic Stamp2  http://www.silab.it/frox/stamp/bs2_math.htm
17) Reynolds Electronics  http://www.rentron.com/
18) The Complete MAC/ Basic Stamp2 Page  http://www.43south.co.nz/stamps/
20) Shaun Wilson Basic Stamp2 Page  http://www.geocities.com/SiliconValley/Orchard/6633/index.html
21) Visual Basic and the Basic Stamp2  http://www.picobay.com/VB.html
**Hobby Shops Selling Basic Stamp**

2) Maplin Electronics: [http://www.maplin.co.uk/](http://www.maplin.co.uk/)
Books :

- **Programming and Customizing the Basic Stamp**
  by [Scott Edwards](#).

- **Stamp II Communications and Control Projects** -- by Tom Petruzzellis, Thomas Petruzzellis; Paperback.

- **Stamp II Communications and Control Projects** -- by Tom Petruzzellis, Thomas Petruzzellis; Paperback.

- **The Microcontroller Application Cookbook**
  by Matt Gilliland, Ken Gracey.

- **The Microcontroller Application Cookbook, Vol 2. with BASIC Stamp 2 Homework Board**
  by Matt Gilliland.

- **Basic Stamp**
  by Claus Kuhnel, Klaus Zahnert.

- **The New Southern Basics: Traditional Southern Food for Today**
  by Martha Phelps Stamps.

- **Stamp II Communications and Control Projects**
  by Tom Petruzzellis, Thomas Petruzzellis.

- **Microcontroller Projects With Basic Stamps**
  by Al Williams.

- **Basic Philately**
  by Kenneth A. Wood.

- **StampWorks**
  by Jon Williams, Parallax Inc.

- **Microcontroller Projects Using the Basic Stamp 2nd Edition**
  by Al Williams.

- **The Basic Stamp 2 - Tutorial and Applications**
  by Peter H. Anderson.

- **Basic Philately**
  by Wood.

- **The Nuts and Volts of BASIC Stamps, Volume 3**
  Matt Gilliland’s [Microcontroller Application Cookbook](#).

- **StampWorks** Jon Williams - 200 pp.

- **Microcontroller Application Cookbook Volumes 1 and 2.**
Accessories:

- http://www.tradetech.co.nz/basic%20stamp/downloads.htm
- http://www.rentron.com/
- http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F010%5F017%5F001%5F000&product%5Fid=900%2D8761
- http://216.239.33.100/search?q=cache:yRPpPaYaEokC:homepages.paradise.net.nz/dkwinter/pic.htm+basic+stamp+shops&hl=en&ie=UTF-8

Applications:

- L.O.S.A Text file of Stamp Applications, includes URLs to projects
  www.hth.com/losa.htm

- Nuts and volts Magazine
  Stamp Applications from Nuts and Volts magazine (also, see our articles) http://www.nutsvolts.com/stmpindx.htm

- http://www.tradetech.co.nz/basic%20stamp/applications.htm


- EME Systems: Electronically Monitored Ecosystems. Home of the OWL2c, and tons of information on the BASIC Stamp. Excellent page on the Stamp IISX.

- Bob Blick's Uses for Basic Stamps: Good examples of projects. Schematics and code listings.
• **Seetron's LCD Application Notes**: Output graphs with a Stamp.

• **Shaun's Basic Stamp Projects**: RF Remote Control, Visual Basic Interfacing, Altimeter.

• Radio Shack

• **The Microcontroller Application Cookbook**.

**Hobby shops selling stamps:**

• Leff Electronics .

• HVWTech.

• River Junction Hobbies .

• J & C Hobbies .

• A.B. Charles & Sons .

• Hooter Chassis & Hobby Shop .

• Radio Shack .