



Column #45, January 1999 by Lon Glazner:

## Back To The Basics (Stamps, That Is)!

So here I am, sitting down at the computer, and asking myself, "What do people want to know about BASIC Stamps?" More importantly, "What do I have to share?" At Solutions Cubed, we handle all aspects of embedded control design. In other words, I've got technical experience. But technical know-how does not a good article make.

Like most engineers, I spend an inordinate amount of time perusing dry engineering manuals. While informative, I think most of us can agree that data sheets are a far cry from good literature. I think the real power in BASIC Stamps is derived from the way they allow us to interact with technology. This interaction is what I hope to explore.

The first time I completed serial communication between a microcontroller and a computer, I felt like I had cracked some secret code. Yeah, so the secret code was well-documented and everyone else already knew it, I felt a sense of accomplishment anyway. I still find myself thinking "This is pretty cool!" when I see MY data splashing across a computer screen.

#### **Column #45: Back to the Basics (Stamps, That Is)!**

BASIC Stamps can be many things to many people. To the inexperienced, they allow a successful foray into the world of embedded control. To the experienced engineer, they are a powerful tool in an ever-expanding tool box.

It is my hope that experienced BASIC Stamp users will find good technical information in my upcoming columns. It is my desire that a number of beginners will experience the sense of accomplishment that understanding technology has brought to me.

Why does the Stamp Applications column exist? Probably because BASIC Stamps are being used by students, teachers, hobbyists, and engineers worldwide. In an educational setting, they can provide months of discussion and learning. To a hobbyist, they may represent a home-lighting solution, or a tachometer for the hot-rod in the garage. As an engineer, I often use them to test various aspects of my electronic designs.

The BASIC Stamp is a powerful and ubiquitous design tool. They're also inexpensive, well-documented, and Parallax provides excellent technical support.

Designing with BASIC Stamps can be described as 50% software and 50% hardware. At times, it will seem like there is an additional 50% that revolves around figuring which part just evaporated in a cloud of smoke, and why.

Certain design techniques help to reduce guesswork and allow the designer to foresee potential problems. These techniques will be the meat and potatoes of my future articles. What is in store for the near future? My Stamp Applications columns will cover topics such as the new BS2-SX (a 50MHz version of the BS2), battery charging technologies, implementation of user interfaces, and data logging. We'll also get into testing techniques for BASIC Stamp based systems.

I'm looking forward to writing this column and hope that you will find something worthwhile in the pages to come. See you next month!