

Re: Any recommendations for a good overview of pic and basic stamps

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From: mike (spamme0_at_juno.com)

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Roger Hamlett wrote:

> "Bill Velek" <billvelek--NO-SPAM--@alltel.net> wrote in message

> news:412A4471.3040001@alltel.net...

>

>>While in the process of trying to find a solution to a problem, I
>>received several suggestions that PIC or Basic-Stamps might be a
>>solution. In order to fairly evaluate those suggestions, and decide
>>whether or not I'm capable enough to use that approach, I'd like to get
>>a good overview of what I'll be facing. I've joined another e-list for
>>basic-micros -- Parallax's forum -- but so far I haven't received an
>>adequate answer to the questions that I'll pose here. I _think_ this
>>would be on-topic here, and I hope no one minds.

>>

>>What I'm looking for is links to sites that will give a broad general
>>explanation to a complete novice of the nature and potential of PIC and
>>Basic-Stamps; I've done a some googling without coming up with anything
>>that is very helpful, so I might be way off base right now.

>>

>>My impression is that these are simply chips that can be programmed
>>(perhaps something like an EPROM?), but it is done with very simple
>>basic-language programs that are fairly short with relatively few
>>instructions, and that the programming is done on a computer and then
>>loaded onto the chip via a cable linking the chip and a PC. Then the
>>chip can be installed on a small circuit board of some sort (e.g., a
>>thermostat), after which it is then able to run the basic-program
>>completely independent of the PC. Besides my thermostat needs, I can
>>see possible future applications in my beer brewing hobby, so I am
>>definitely interested at this point; for example, if I'd eventually like
>>to build either a RIMS or HERMS (for non-brewers, that would be a
>>"Recirculating Infusion Mash System" using a magnetic pump to circulate
>>the liquid in the mash to help keep it uniform in pH and temp, and a
>>"Heat Exchange Recirculating Mash System" which also actually controls
>>the temp through various stages). Both of those systems can be designed
>>to be fully computerized with temp sensors, PID controllers, solenoid
>>valves, and magnetic pumps.

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>>At this point I'm not seeking technical help to solve a specific
>>problem. Rather, I'd just appreciate some insight into what I'd likely
>>be facing in this area, and also the sort of other 'fringe' benefits
>>(like a cool hobby) that I might derive from this in order to become
>>involved; for instance, if I purchase a bit of equipment, take my time
>>learning all of this stuff, and then build my project, what other sorts
>>of things can typically be done with this technology? What sort of
>>costs am I facing -- at a minimum -- especially if I have only a
>>soldering iron and a simple multimeter? What kind of learning curve
>>will I be facing? ... and will I need to learn the equivalent of what it
>>takes to earn an associate's degree, or perhaps just a single college
>>course? Is there a website or FAQ page that will start me out with a
>>good overview of this area of technology, explaining how the entire
>>process works?
>>
>>Thank you for any help.
>>
>>Bill Velek
>
> Another poster has covered most of the 'Basics'. The plus of the Basic
> approach, is that it is quick to program, using a relatively easy to learn
> language. However the overall performance is severely limited, when
> compared to the 'bare' processor. As an example, several people have
> implemented complete TCP/IP interfaces on a PIC, with something like the
> Realtek 8019 interface chip. However the Stamp module, would not even be
> able to start on such a project, lacking the speed, and the ability to
> handle events at the timescales needed. Conversely though, many of the
> Robot 'maze solvers' featured in TV shows etc., use the Basic stamp, as
> their core.
> The complete development system for these, comprises a small unit driven
> from a PC serial port, that reprograms the EEPROM used to hold the code.
> Look at:
> <<http://www.seattlerobotics.org/encoder/may97/picchip.html>>
> <<http://www.cybox.fsnet.co.uk/basicstamp.htm>>
> <http://www.compman.co.uk/htmlcat/1578201012_Microcontroller_Projects_Using_the_Basic_Stamp.asp>
> Kits are available to make programmers for the PIC itself, that run from
> only a few dollars. You can also build the interface and socket to program
> the Stamps (the details are in the full manual). The complete kit,
> comprising a carrier board, programming cable, one stamp, manual etc.,
> costs about £60 in the UK (depending on which Stamp is involved).
> The Stamp, uses either a PIC, or the Ubicom SX processor, in the faster
> versions, but the language remains the same.
> There are dozens of PIC sites on the web, covering everything from basic
> projects to complex motion control systems. Start with something like:
> <http://www.winpicprog.co.uk/>
> <http://www.cq-tv.com/articles/picprog.htm>
>
> Best Wishes
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www.microchip.com is a good place to go for pic info.

The learning curve is STEEP, but once you get set up, you can turn out code in a flash.

I use a basic compiler on a PIC with a bootloader. Just a few keystrokes and you're up and running with a newly programmed PIC.

If I were starting over, I'd seriously consider the AVR chips.

mike

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Return address is VALID.

Wanted, 12.1" LCD for Gateway Solo 5300. Samsung LT121SU-121

Bunch of stuff For Sale and Wanted at the link below.

Compaq Aero floppy,ram,battery.

MINT HP-41CV, 2-METER AMPS, 200CH SCANNER

<http://www.geocities.com/SiliconValley/Monitor/4710/>