

Re: Learning to use PICS

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David Harper wrote:

- > All,
- > I appreciate everyone's suggestions and help so far. Right now I've
- > started diving into understanding the architecture and memory of a
- > typical PIC (16C84), which I figure is the best place to start. After
- > that, I figure the programming will be a lot easier to understand.
- >
- > The program memory I understand, no problem (like the BS2, only it
- > seems only instructions can be written at these locations for PICS,
- > and only during programming).
- >
- > However, with the data memory allocation, I'm having some difficulty
- > based on some of the online datasheets:
- > <http://ww1.microchip.com/downloads/en/DeviceDoc/30445c.pdf>
- >
- > and beginner guides (from piclist.com):
- > <http://www.piclist.com/techref/microchip/intro/pic.htm>
- >
- > From what I've read, there are 2 banks each divided into 128
- > registers. The first 12 registers are SPR, which more or less define
- > the chip's current state. The next 32 registers are GPR (like RAM?).
- > What are the next 88? It's defined as "unimplemented data" according
- > to Fig 4-2 in the 16C84 datasheet.
- >
- > Secondly, figure 4-7 (pg 18) shows 4 banks, not just two... just how
- > many banks are there for this chip? Can it be more than 2 banks for
- > different PICS, which is why they're showing it as 'off limits', so to
- > speak?
- >
- > Lastly, back in figure 4-2, it states the 36 GPR in bank 1 are mapped
- > to bank 0. Does this mean they're connected, and if a GPR in bank X
- > changes, then the same GPR in the other bank will change also? If so,
- > are any of the SPR connected in this fashion?