

Pic Projects.

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Environment

Naturally, since I use Linux, I use Linux-based tools. There are many incarnations of these, but the ones that suit my purposes the best are:

- Picasm as the assembler.
- Picprog as the Pic programmer. (Compatible with the hardware described below, an RS232-based programmer requiring no external power supply, simplicity itself...)
- Picsim an X-based full-featured simulator.

Projects

Some (private) simple projects that I have messed with, that are not owned by some company or other are detailed below. In addition, I have implemented an Electricity Pre-Payment meter using a dual-processor, multitasking, real-time operating system on two '84s, using RF as the comms medium. Due to political reasons, this was not marketed, but derivative products have been, as usual, at no benefit to me :-)

Pic Programmer

I am a minimalist, hence Jaako Hyvatti's Serial port based programmer hardware is the very simplest on the scene. No external power supply, One BJTs, three diodes, two caps, two zeners, and four resistors. It simply cannot be simpler! The compiler I use is Timo Rossi's Picasm (VERY fast, wonderful).

The schematic is simple:

Since with so few components I did not bother with a PCB, I wired it all together, and used my favorite substance: Pratley. Herewith some pics of the device :-)

Timings

Doing a Real-Time clock or Operating System is not as simple as it sounds. Some of my Real Time Clock observations are a little revealing.

Water Computer

Simple device to water the olde garden.

Gate Controller

Replacement controller for a stupid, (and fried) one.