

Hardened Pentiums no motherboard of HP 100 8186 + 10 megs

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I had worked on other systems for course calculation, vehicle information, etc. But long term exposure to radiation is to be considered a problem. One solution was the reed switch electro-mechanical really just a binary calculator just for that purpose. Even with a modern system this would still be a good back up.

The choice though in the 1990s was the motherboards of a HP 100. I had one with a 5 and a 10 Meg flash card. The screen and the keyboard had leads that could be extended, with a transistor etc. The overall size was 3 in. by 6 in. with the card in. The placement had long been decided by what was known from the book *The Space Environment* (1969), as many gram/cm for as many cm as possible. The place for the computer and for sleeping was where the most shielding was.

The knowledge moving beyond simple circuits came from Radio Shack Hand pocket hp1 24 digit display of possible 80 characters. The chip of most importance was the one used to interface with a tape drive. The name by function is a high volt bypass.

This chip is used in pinballs and video games for feeds to reed switches. I vended pinballs and video so my knowledge of circuits grew. Having to fit circuits with transistors because the manufacturer had his own numbers printed on the originals or they just plan fried. Designing is then fitting together inputs to outputs etc. Pinballs use 8 by 8 grids for lights and switches with 3 generations of transistors for powering the bumpers, thumpers, and anything with a motor. With the use of by now an old friend the high volt bypass or whatever it is called in the IC handbook today. The one thing I know helps in working on machine design is to remember it is digital logic. Once it does or is not working remember it is still "Operating logically" but something has changed.

One of the companies big in computerized heating and air-conditioning systems for skyscraper or large buildings is an ex-manufacturer of pinballs and video.

I had figured about 10 years for this whole project. The computer and programming portion being the cheapest would first part to work on every time money was low. I had for the HP 100 QBasic, VBDOS, and MASM 5.10 for programming languages. The VBDOS assemblies to about 2/3 the speed of assembler or a littler slower than C/C+. For get making little windows it is just faster. Any thing that needed to be faster or that was for input output would be from MASM 5.10. The other parts of the project I had worked on for 17 years. That would be this year.

I would still like to do the whole project myself.

Some day in space some will do project like this or if we are in space we will be just spam in a can.

Literally.

Beyond some scientist doing experiments, there is no reason for anyone go into space unless they could do everything so that their life there could continue unaided.
and to

Bob L. Petersen

X-hybrid SSUV: X-plane Shuttle & Space Station

<http://www.lookingfora.0catch.com/x-plane.html>

Space is where I want to be

<http://www.lookingfora.0catch.com>