## It Escaped From the Lab – Part II Eric Smith

Another escape from an HP calculator R&D lab.

Hmmm... This one doesn't look anything like a calculator.



Maybe we should zoom in to get a clearer view of the legends.



If "NIB" wasn't enough of a hint, "SATURN BUS" sure is. And it has a gozinta and a gozouta. Looks like it only has three of five possible boards installed



Another view of the box. It has a nice carrying handle.



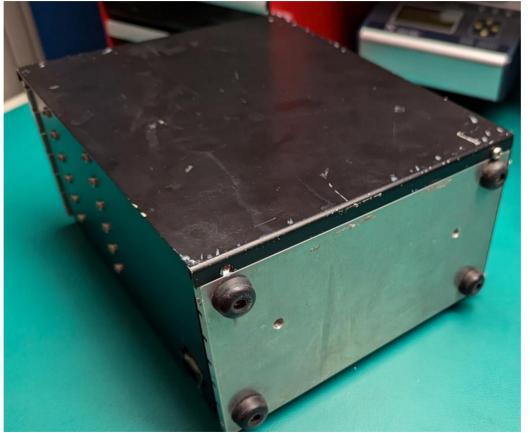


The back of the box. Despite the front panel labeling, it looks like it has room for SIX boards. There's a power socket for an HP 82059B wall wart!

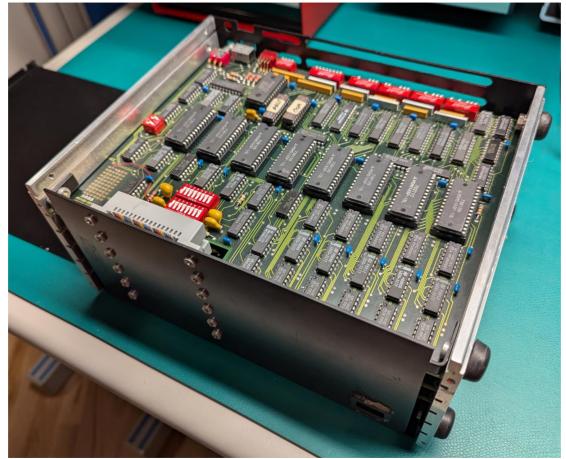


The right side of the box is pretty boring, but it does have a set of feet there, in addition to the ones on the bottom (not shown), so you can stand it on end with the carrying handle

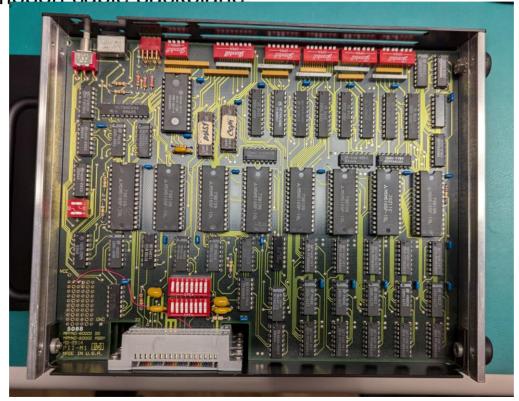
up.



## Now the moment of truth. Let's take the top off the box!



Now the moment of truth. Let's take the top off the box! Here's the topmost installed PCB. The next two down are identical. There are eight 8Kx8 static RAM chips, two PROMs (I think), even more DIP switches, and a whole lot of logic, with a recessed edge connector plugged into a ribbon cable backplane





The board in the bottom slot is for the power supply, common circuitry, and cabling.





In case you haven't already figured it out, the box is a Saturn bus ROM emulator, used for fixed-address ROM. This could have been used for \_any\_ Saturn-based product. Each of the emulator boards appears to emulate four blocks of 16K nibbles (8 Kbytes), each block having its own configurable base address using the DIP switches along the front edge.

This is for hard-configured ROM emulation only, not HP-71B plug-in ROM emulation. To use it, I'll have to trace out some schematics, at least as far as determining the Saturn bus pinout on the front panel connectors.

