

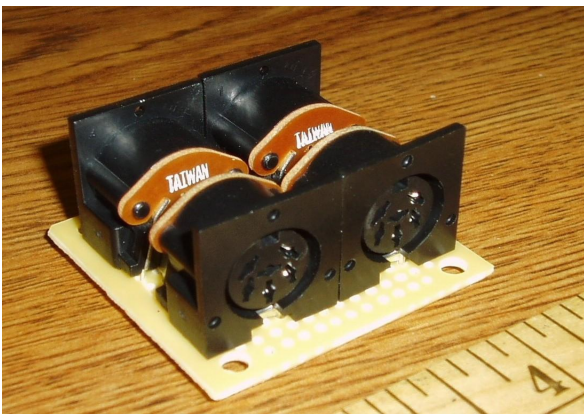
My Serial Port Story

By Jim Peters

It all started in the late 80's when I wanted to connect two printers to my 64 and the printers only had one serial port. That's when I purchased a Serial "Y" connector cable. It worked OK but sure made a mess, long cables going everywhere. That's when I decided to make a PC board and mount three serial connectors, eliminating the cable mess. That worked just fine for me.

Then about a year ago, I saw a posting on the Videocam web site. It was Linda Tanner trying to find a serial "Y" cable. She had found one, but it was outside the US and the shipping cost was almost the same as the cable price. I thought of my alternative "Y" cable connector that I had built for myself, so I contacted Linda and offered to make her a connector. This time I suggested one with 4 connector ports. One port for input and three ports to connect her printers and her uIEC/sd drive.

She agreed and I proceeded to collect the parts and assemble my first serial cube project. Now I have aged some since I built the first connector for myself and I found that I was not as steady as I had been about 25 years ago. Drawing a circuit on a piece of copper clad circuit board was not going to work this time. I had to settle for a Radio Shack predrilled project board and solder jumper wires between the connections. That worked, but was still a challenge. I connected up the project and tested it every way I knew how. It worked OK, so I mailed it of to Linda and awaited he return comments.



4 Port Serial Connector (Linda Tanner's looks like this.)

The results were good I guess. Linda said it did the job and asked if I had thought of making and selling this project to other Commodore users. I had considered that. It would be nice to produce an alternative to the old "Y" cable, that would be cheaper and would be available in the US so it would

ship at a lower cost, but because my hands were so unsteady I had to get help soldering Linda's unit together.

Later I remembered that Jim Brain had mentioned, during a presentation at the 2009 Chicago Commodore Expo, that he could get PC boards made for projects at a reasonable cost. I contacted Jim about my project and he agreed to help me out. He also suggested I find a project box for the unit and so we could determine the size of the boards I wanted.

I started looking for a good, but cheep, enclosure of some kind, for my serial cube project. I started out trying to find a children's toy plastic building block. I went to every toy store and even a few garage sales, but just couldn't seem to find what I wanted. Then one day I, while rearranging the grandkids play area, I found a Fisher Price Little People Building Block, it was just what I was looking for. I measured the inside and fitted an assembled board to it, but that was only half of it. It took some head scratching and some craft work before I got four nice round holes cut in the sides of the soft plastic block, for the serial connector ports. Version two, The Serial Block Toy, was complete. I quickly took a picture, of what looked like a large yellow Lego block with two serial ports on opposing sides, and emailed it to Jim Brain, asking for his opinion.



Serial Block Toy (Goog got one like this.)

Jim said it looked like a kid's toy and that a regular black project box would have more appeal and probably would sell better. I really thought that the Yellow block was kind of unique, but had to agree that most people might not have my sense of humor or same tastes, so I found a two inch square box from MCM Electronics and assembled version number three, the Serial Cube. I again took a picture and emailed it to Jim Brain, hoping he would give his approval and would order the first test run of boards.



Serial Cube in a black project box.

Jim did like the black project box, but we decided that as long as we were going to have a printed boards made, that switches could be added to enable turning the ports Attention line on and off. This would give the user the ability of connecting disk drives or printers, with the same device number, at the same time. He also said that he had already made a layout of a board and would add the switches and he would submit the layout to a manufacture for production.

About the middle of December, last year, I got an email from Jim stating that the first test run of printed boards were back from the manufacture and that he was going to ship them to me. Jim also said he had found a project box for the QuadPort board and gave me the manufactures name and part number. That sure was nice of him. That meant I wouldn't have to spend a bunch of time looking through all those parts books. He had also ordered enough switches for ten units and if I was interested would to send them with the boards.



The First design QuadPort PC Board.

I assembled the first unit and started testing it out. Everything work just as planed and I proceeded to build a special unit for my friend Bob Wells. It had only two switches instead of the normal four. It used all four ports, but each switch would control two ports. The first switch allows him select printer

outputs between a Super Graphic interface and a Okidata printer and the second switch allowing drive swapping between a uIEC/SD and a Commodore CMD disk drive. Bob says it worked out just great.



Bob Wells Custom QuadPort Switch box.

I have assemble all of the QuadPort boards, which was really easy and fast, a hole lot easier than trying to shake wires into little holes and trying to solder them down. I still haven't found a simple or easy way to cut the serial connector holes.



Assembled QuadPort Unit. (Payton Byrd bought the first one.)

Even though I have sold all but two of the boards, I am a little disappointed with the project cost. I really wanted to keep the cost lower and at this time the board, box and switches cost me about \$ 25.00. I do plan to order more boards in the near future and if anyone is interested the Unit costs goes down the more PC boards I order at a time. Please feel free to contact me at < tjpet@mchsi.com > .

I have already come up with some additions or changes that might be of interest to possible future users. Like an isolated reset for each port, allowing the reset of one port at a time or keeping a port from being reset when the system is reset and embedding a uIEC/SD inside the QuadPort enclosure.