

The monitor in an IGT PE+ is an RGB 15KHz (NTSC TV type resolution/frequency). The kicker is that the PE+ board outputs inverted RGB instead of what most RGB monitors are looking for.

While some LCD panels do allow for TV style inputs (Composite Video, S-Video etc.) they don't have an RGB input unless they are a VGA monitor (like a PC Computer) too. And then, the frequency of VGA is 31KHz and up. Since I know little about what is a really available in LCD's someone else may know of a unit that will accept RGB at 15KHz.

How do you convert the video back to normal?

It will require unsoldering a chip on the board (the video latch) and replacing it with a socket and then building an inverting latch using two ICs. I did it when I was trouble shooting a board on the bench with a standard 15KHz RGB monitor. I don't have the exact information here at work but if you think you can do it, I will post the instructions tomorrow.

Here you go. IC on the left is a 74HC540. IC on the right is a 74HC574

Jumper the following pins to each other. Easily done by bending the leads at a 45 degree angle and soldering direct.

74HC540 74HC574

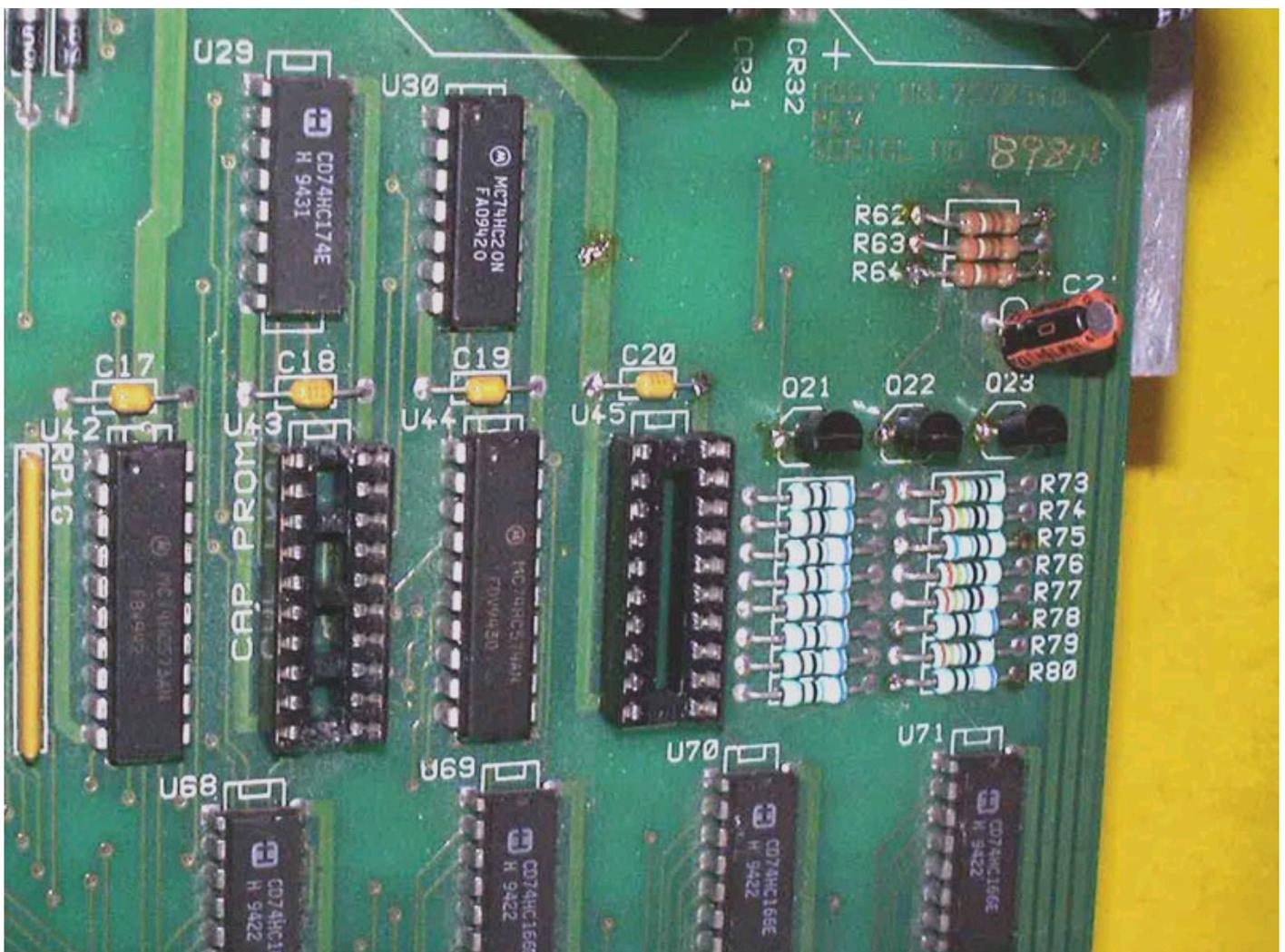
- 11 9
- 12 8
- 13 7
- 14 6
- 15 5
- 16 4
- 17 3
- 18 2
- 19 1

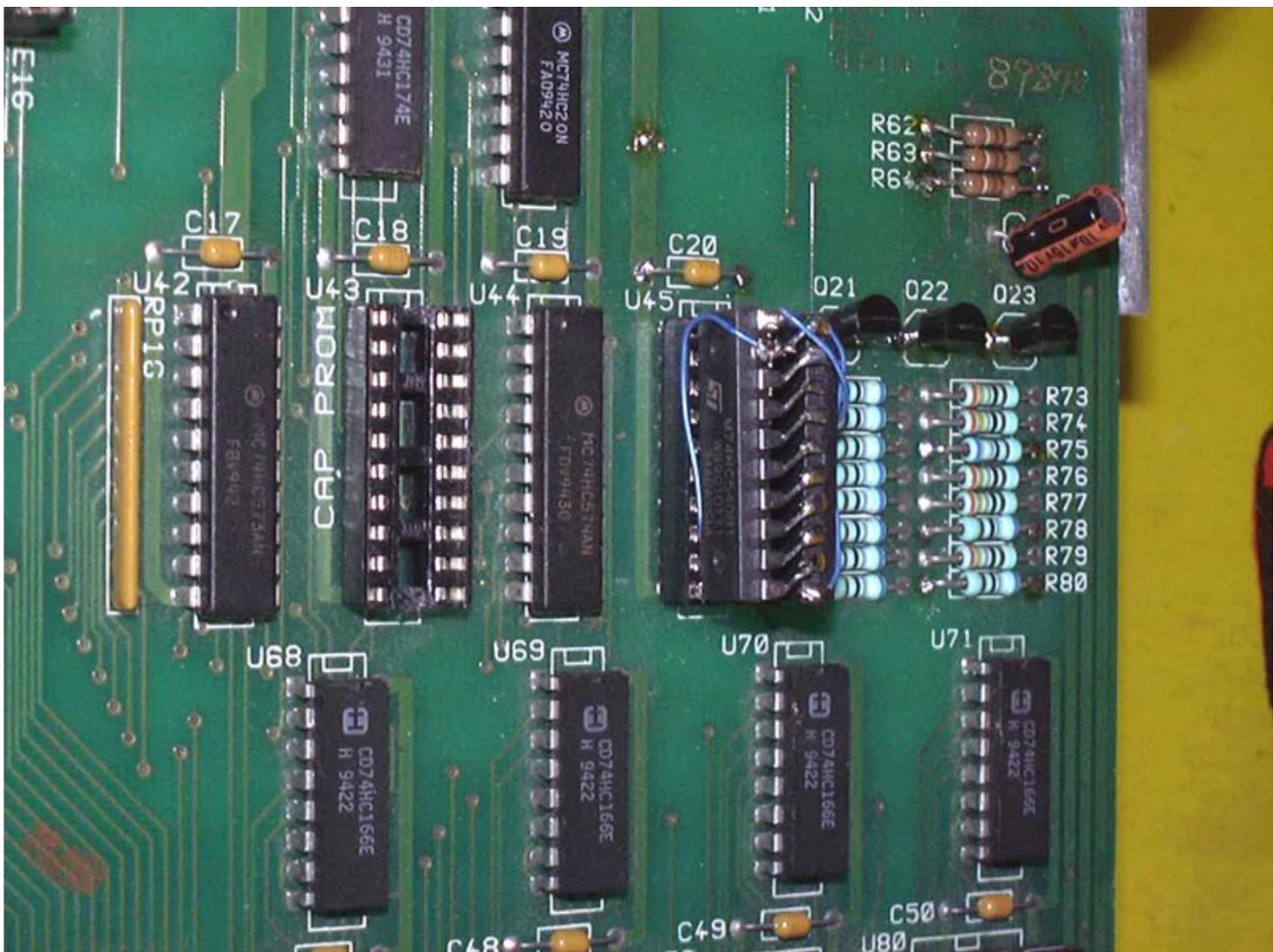
Also jumper 540 Pin 20 to 574 20 (Vcc)

540 Pin 10 to 19 (GND)

574 Pin 1 to 10 (GND)

Photos attached. Board is a Superboard. I think the same IC on the non super is U52?









U43 is the socket for the Bipolar PROM which is IGT's "CAPROM". This is a small PROM which contains the color pallet for the Graphics. You would need to locate the proper CAPROM that goes with the 4 CG Graphics chips installed on your board.