Subject: Re: Gryphon 68030

Posted by yoda on Mon, 13 Jun 2016 15:04:15 GMT

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lynchaj wrote on Mon, 13 June 2016 05:22Hi, yes regarding the video chip that was an area I had compromise on because the SMT chip carrier/daughter board part is not available in KiCAD. So I am assuming it will mount directly on the PCB.

Where was the problem with the video chip on the original Gryphon? I think you mentioned it was rotated 90 degrees or something like that. Was the footprint for the daughter board wrong?

I'd like to see if the video chip idea works.

Thanks

Andrew Lynch

Hi Andrew

Not sure what you are saying here but please do not put the chip directly on the board. The adapter board is simple and you should be able to make the part easily in KiCad. It is just 2 inches square with 32 pin dual male headers on each side. The even pins went on the outside and odd on the inside if I remember correctly. It should be easy to do in KiCad - the tedious part is putting the pin labels on. I will take a shot at it if you want. The way Gryphon was done was the dynamic ram for the video was place on the board (this is very easy to solder) and the 3 resistor that attached to the video ram and then the 2 inch square around it had female headers to accept the adapter board so the video memory was underneath the video board. This chip is just too hard for the hobbyist to solder directly on the board. If not done right it will cause all kinds of shorts and the rest of the board will not be able to be debugged. The ethernet chip is hard enough and it has an easier footprint - I would even suggest doing the same for it if possible. I know Paul was unsuccessful on first board soldering the ethernet and severely damaged that board.

I will send you some photos tonight and we can see if we can make it work. Look at http://www.proto-advantage.com/store/product_info.php?product s_id=2600011 for reference. They will order the chip from Digikey and attach it to the board for a small fee for those that don't feel comfortable soldering it themselves. I have one from them already, though I don't know if I fried the chip because Paul's original footprint had rotated and mirrored the signals if I remember right.

Dave