
Subject: MiniMax8085 - Extension Board
Posted by [Sergey](#) on Fri, 08 Oct 2021 21:23:39 GMT
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Hi,

I am designing an extension board for my MiniMax8085 SBC
(<https://github.com/skiselev/minimax8085>)

It is rather a mix of components, that hopefully will allow to run a bit more things than just the monitor and the BASIC interpreter:

- 8231A/Am9511A floating point coprocessor
- 8254 timer
- 8255 parallel port interface
- Additional 32 KiB SRAM, which can be switched in instead of the ROM

The preliminary schematic and the PCB layout are attached.

I'd appreciate your feedback!

Thanks,
Sergey

File Attachments

- 1) [Mini8085Ext-Schematic-0.9.pdf](#), downloaded 381 times
 - 2) [Mini8085Ext-Board-0.9.pdf](#), downloaded 413 times
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Subject: Re: MiniMax8085 - Extension Board
Posted by [b1ackmai1er](#) on Sat, 09 Oct 2021 03:25:08 GMT
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Nice, love to build one.

Subject: Re: MiniMax8085 - Extension Board
Posted by [alkmar](#) on Sat, 09 Oct 2021 20:39:15 GMT
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I can't wait until you sell PCB's or release the gubers I have two MiniMax8085 who need a friend :p

Subject: Re: MiniMax8085 - Extension Board
Posted by [Sergey](#) on Mon, 18 Oct 2021 20:16:36 GMT

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PCBs ordered, I'll keep you updated on the testing progress.
I'll post the design on GitHub once it is tested

Subject: Re: MiniMax8085 - Extension Board
Posted by [Sergey](#) on Sat, 08 Jan 2022 08:19:18 GMT
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Well, it's been a while.
I made a stupid mistake in the first revision - used wrong footprint for DC-DC converter.
Updated/reordered PCBs.
Spent some time building and testing the board over new year's break.
All seems to work properly. The only minor annoyance is that Am9511A APU's END signal is connected to TRAP, so it causes a non-maskable interrupt on completion of every instruction.
Anyway, as promised the design is here: <https://github.com/skiselev/minimax8085-apu-ext>

I have a few extra PCBs in case someone is interested. Probably just for the price of shipping...

File Attachments

1) [MiniMax8085-APU_Ext.jpg](#), downloaded 696 times

Subject: Re: MiniMax8085 - Extension Board
Posted by [Sergey](#) on Fri, 14 Jan 2022 22:12:36 GMT
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b1ackmai1er, alkmar: Please let me know if you'd like the PCBs :)

Subject: Re: MiniMax8085 - Extension Board
Posted by [alkmar](#) on Mon, 17 Jan 2022 21:30:55 GMT
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Sent PM, I would love to get a pair of these PCB's 8)

Subject: Re: MiniMax8085 - Extension Board
Posted by [alank2](#) on Sun, 23 Jan 2022 17:47:18 GMT
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Sergey - are you planning on making a CP/M that can run on the minimax8085 using this extension board?

Subject: Re: MiniMax8085 - Extension Board
Posted by [Sergey](#) on Wed, 26 Jan 2022 16:05:03 GMT
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Alank2, that was the idea... When I get some free time.
Unless someone else wants to take a stab at it.
It shouldn't be too difficult. One possible issue is the lack of storage devices, which can be resolved by using the PPI serial port to attach one (e.g. PPIDE).
