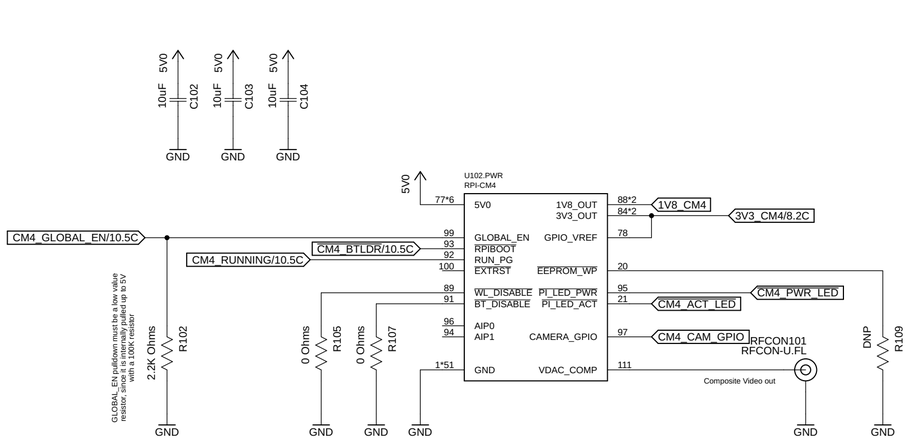


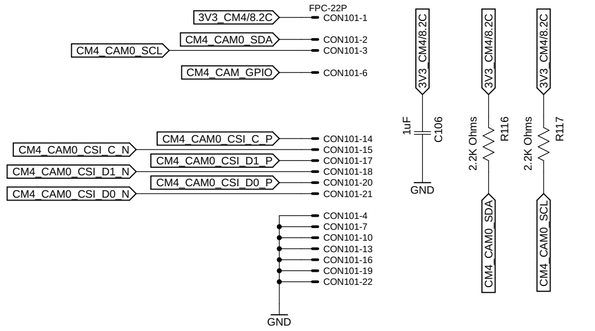


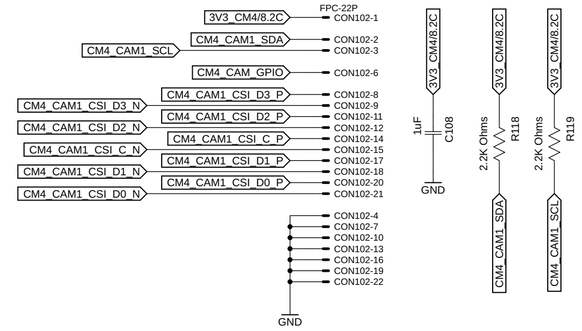


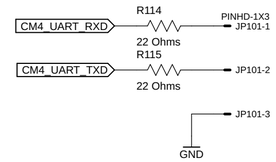


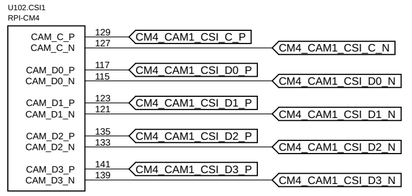


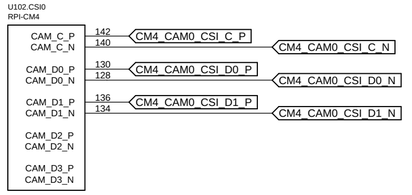


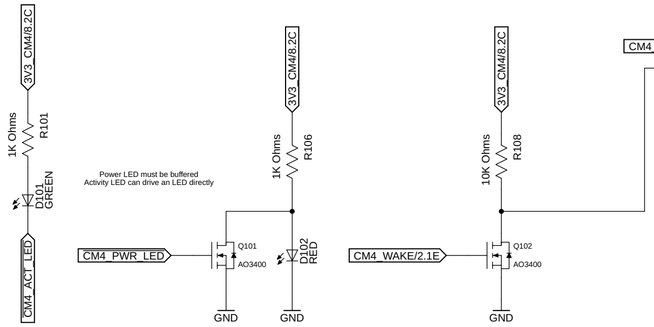


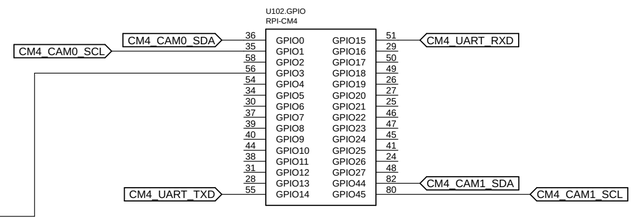


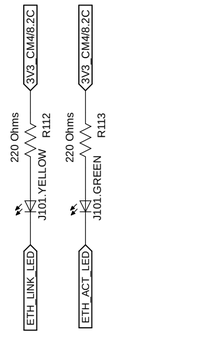


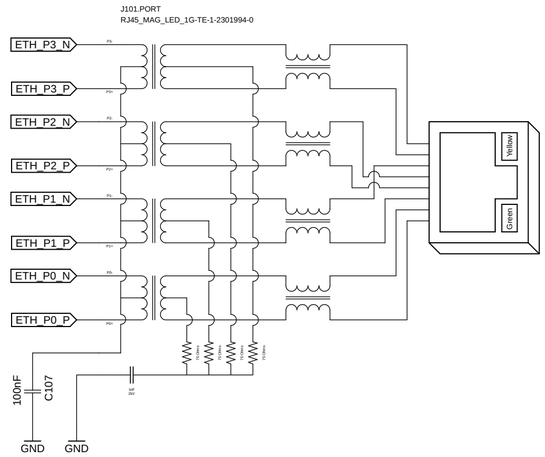


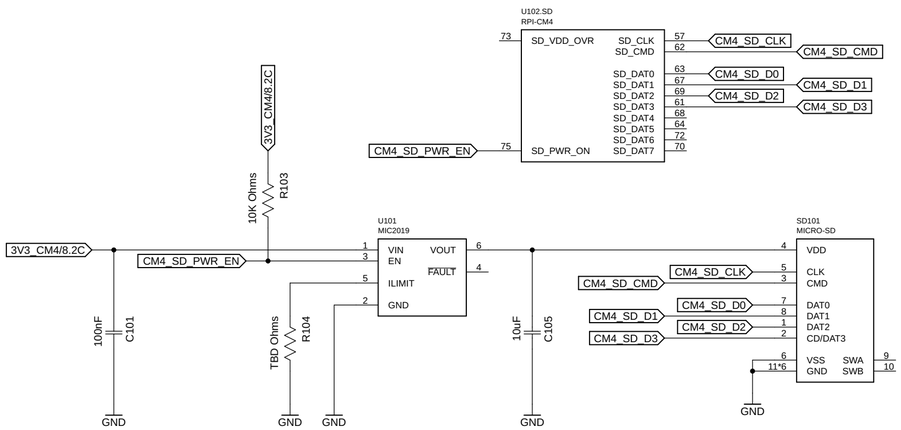


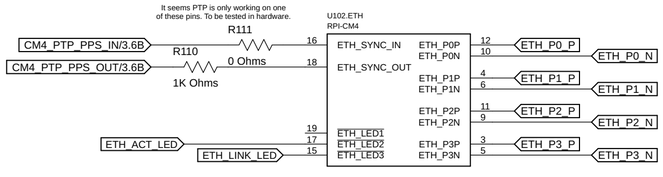


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| icyradio-main | João Silva Logo |
| Joao Silva | |
| Sheet: 1/13 | Compute Module 4 |
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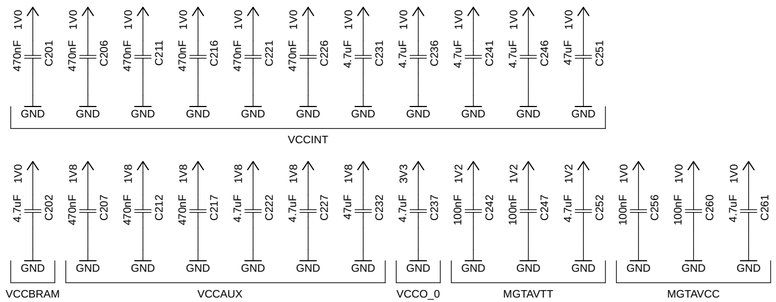


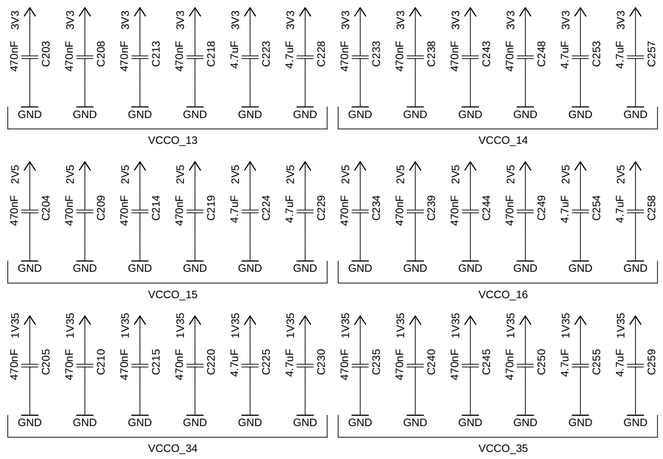


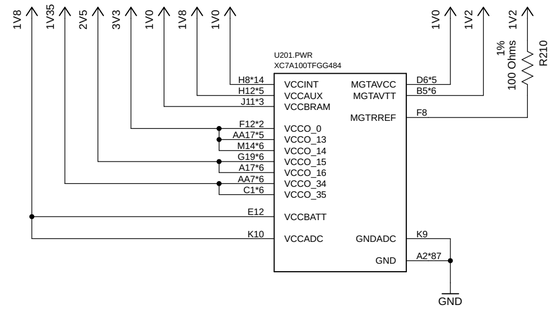


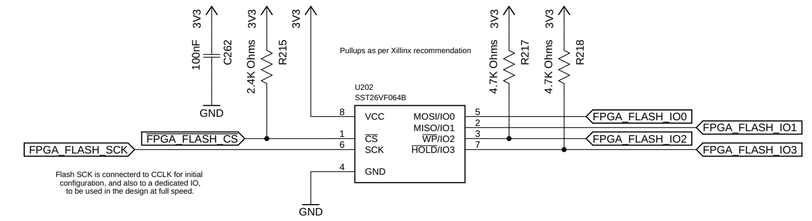


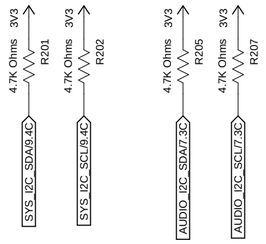


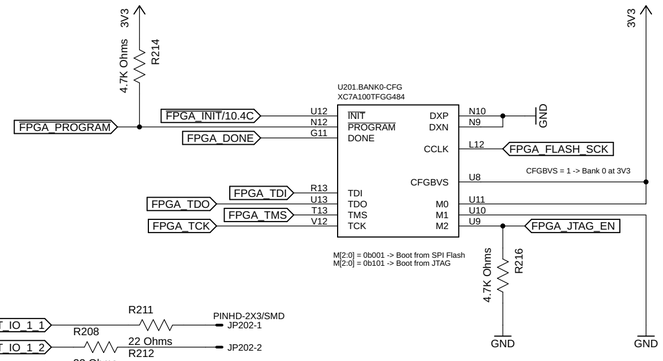


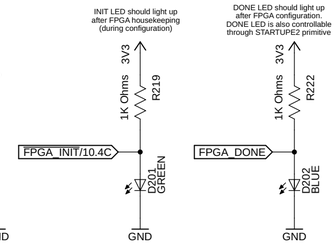


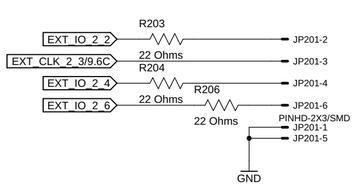


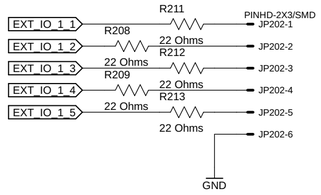


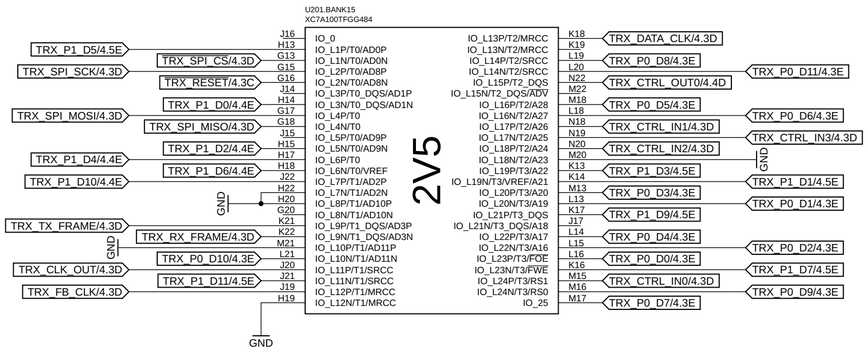


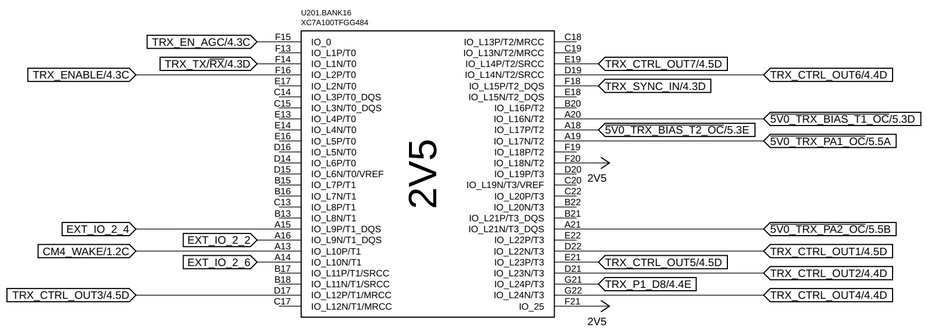


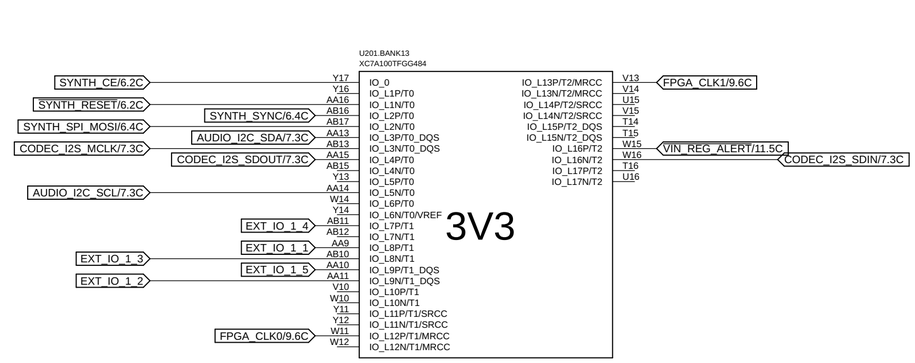


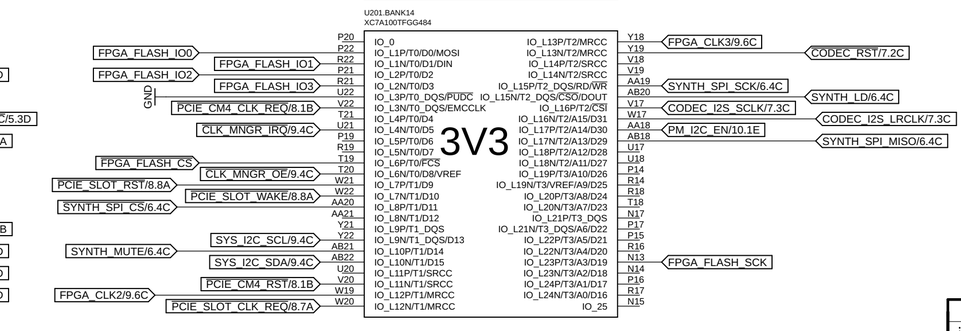


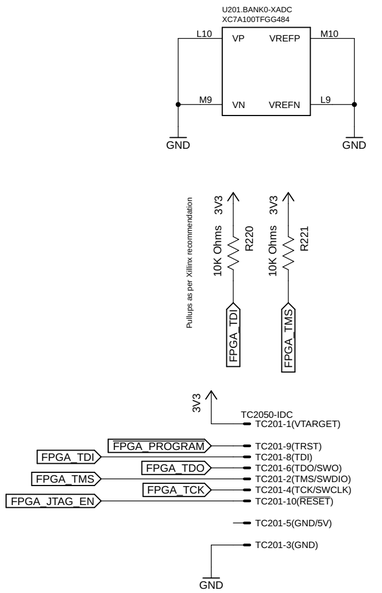


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| icyradio-main | |
| Joao Silva | |
| Sheet: 2/13 | FPGA |
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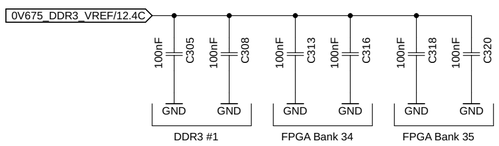


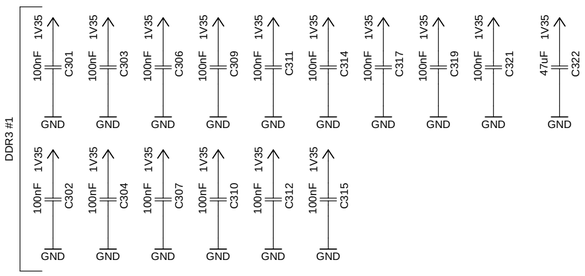



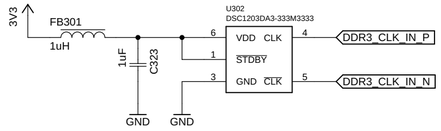


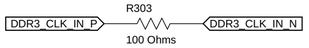


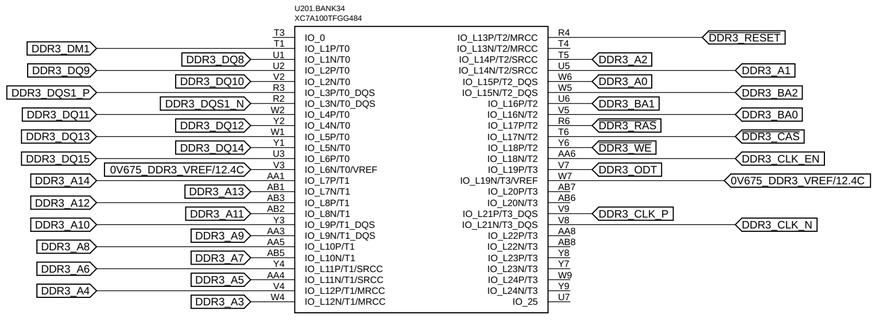


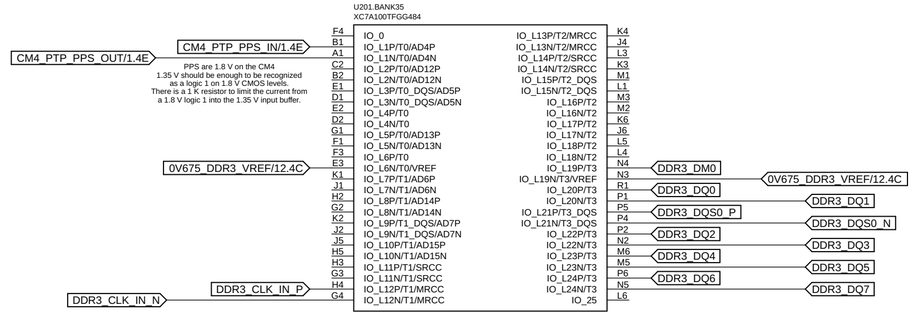


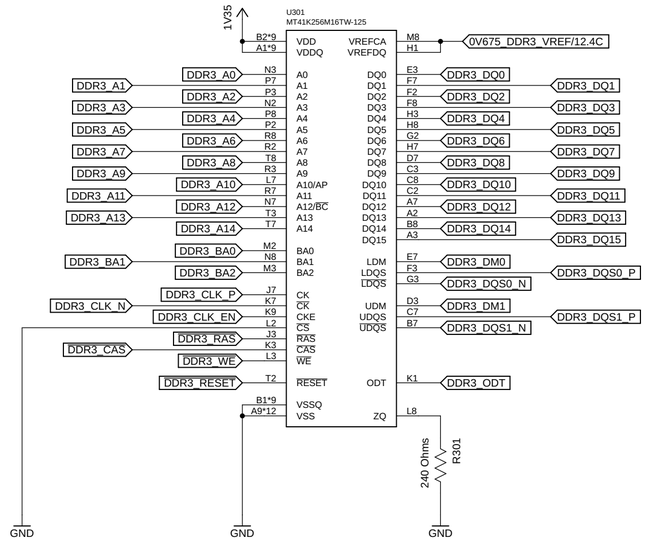


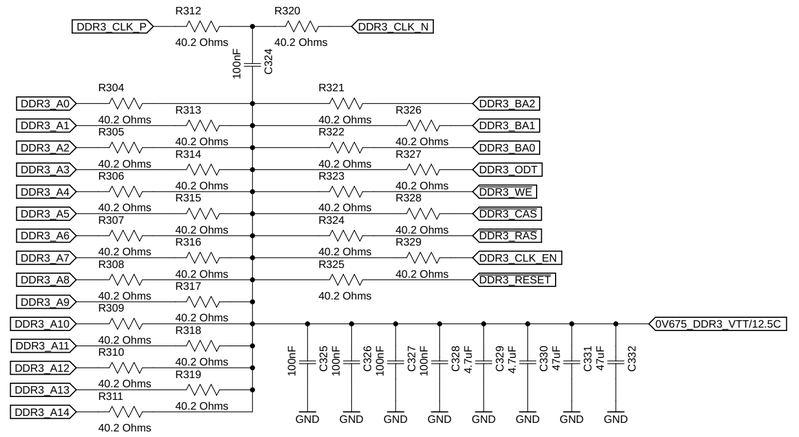


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| icyradio-main | |
| Joao Silva | |
| Sheet: 3/13 | DDR3 |
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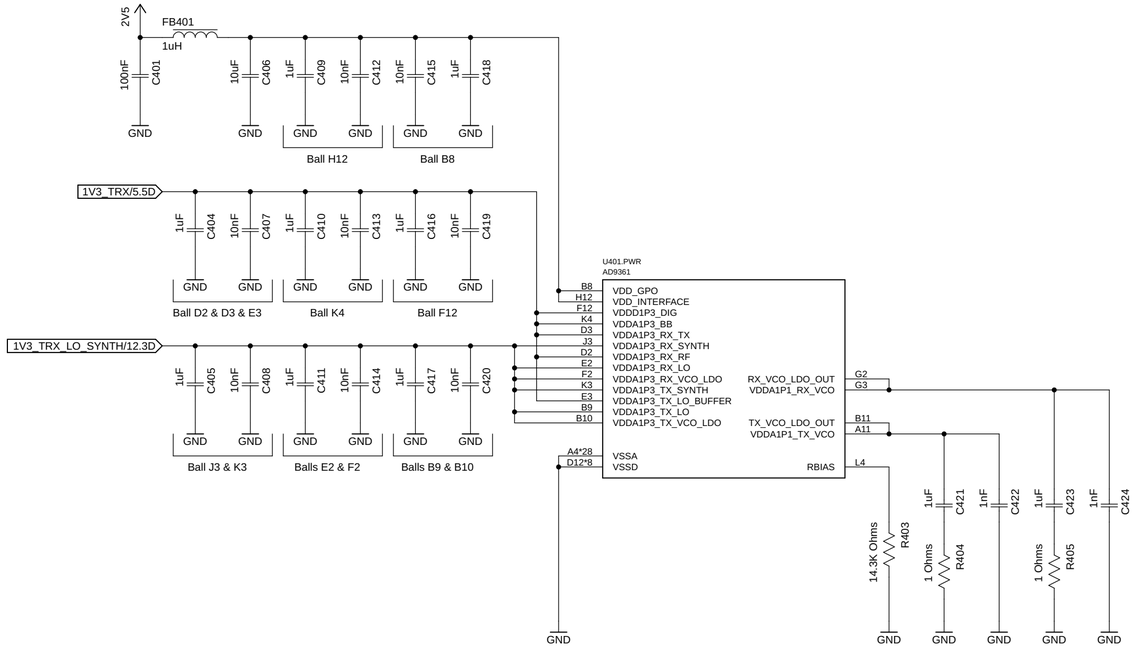
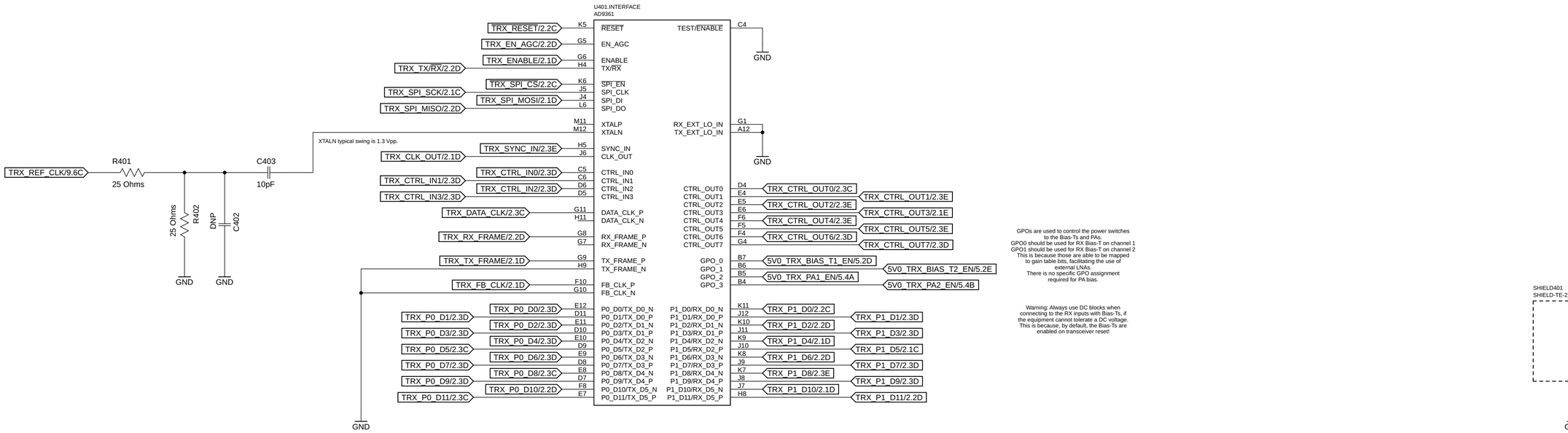
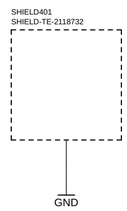



TODO:
- AUXDAC
- AUXADC
- Add keepout on RF components




GPOs are used to control the power switches to the Bias-Ts and PAs.
GPO0 should be used for RX Bias-T on channel 1
GPO1 should be used for RX Bias-T on channel 2
This is because those are able to be mapped to gain table bits, facilitating the use of external LNAs.
There is no specific GPO assignment required for PA bias.

Warning: Always use DC blocks when connecting to the RX inputs with Bias-Ts, if the equipment cannot tolerate a DC voltage. This is because, by default, the Bias-Ts are enabled on transceiver reset!

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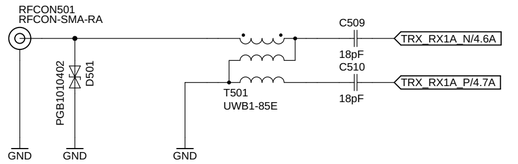
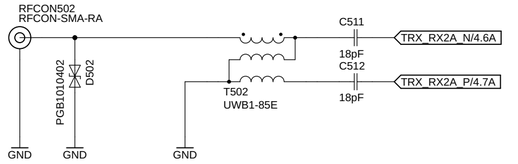
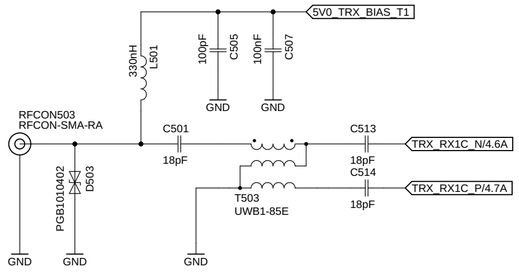
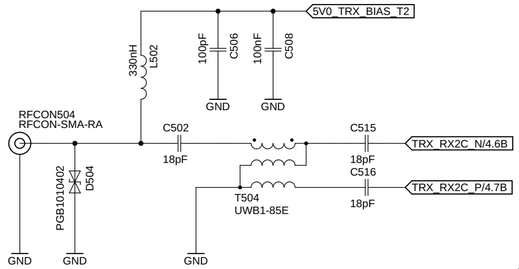
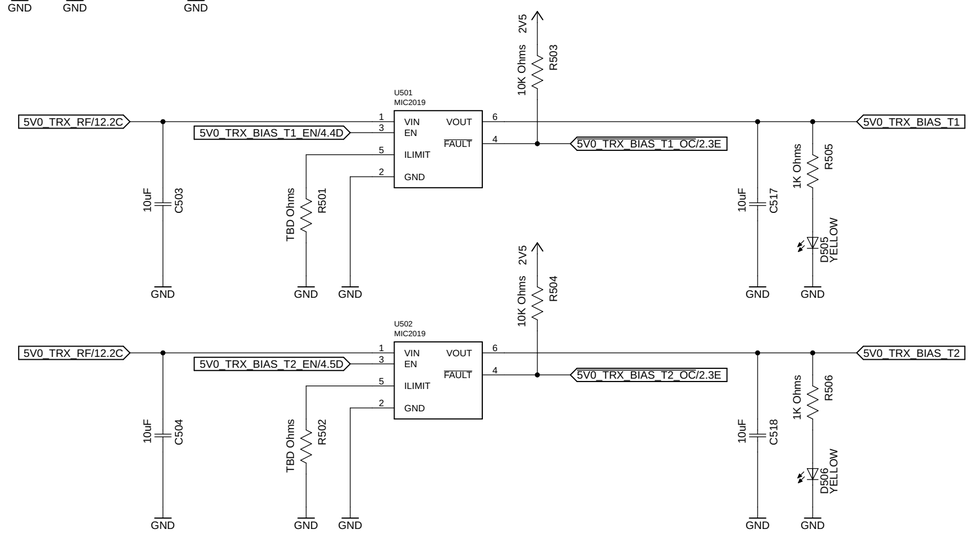
| icyradio-main | |
| Joao Silva | |
| Sheet: 4/13 | RF Transceiver |
| Date: 13/01/23 22:59 | Rev: 2 |

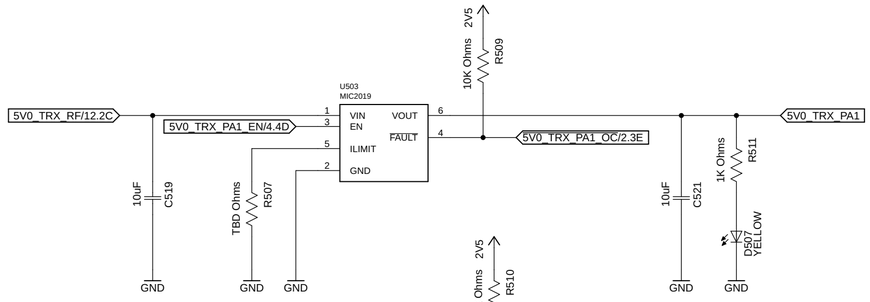


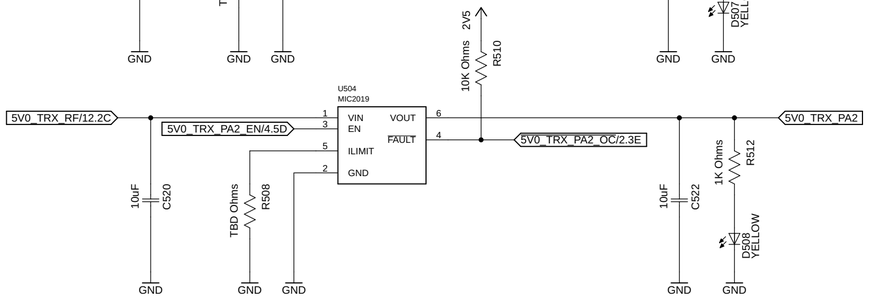



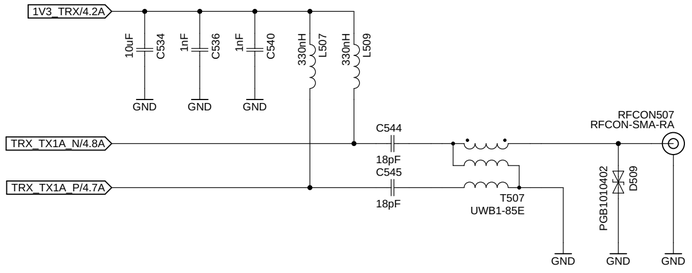



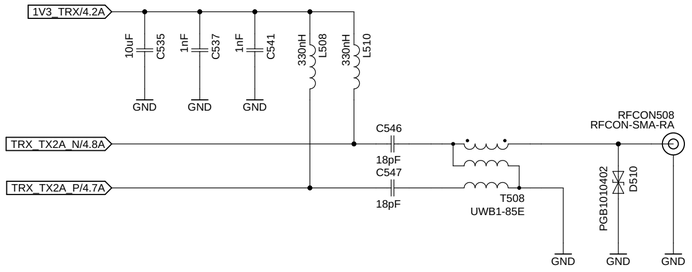



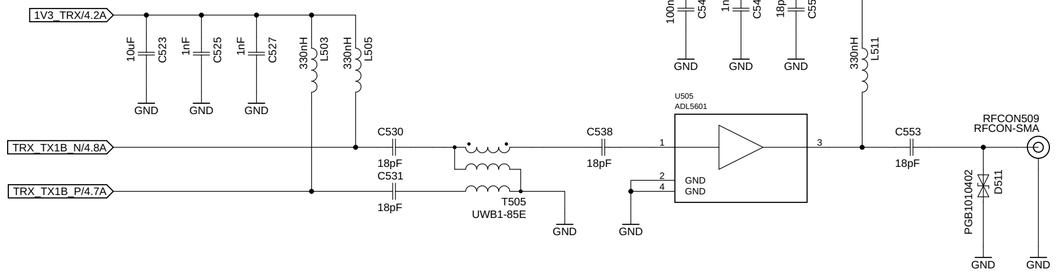



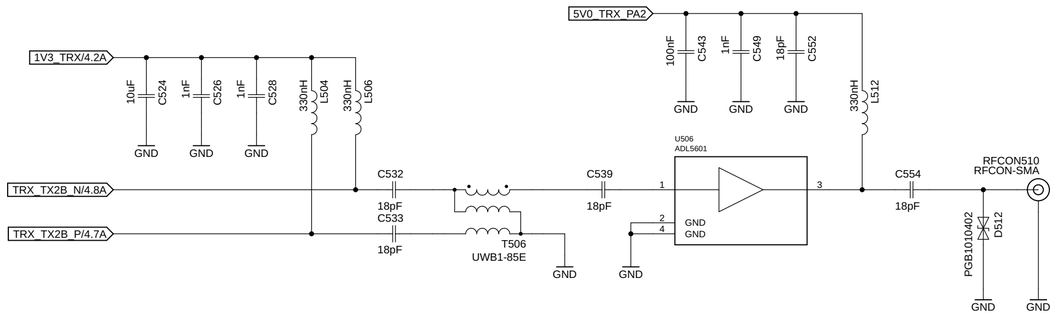



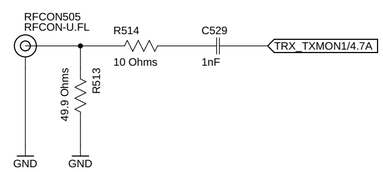



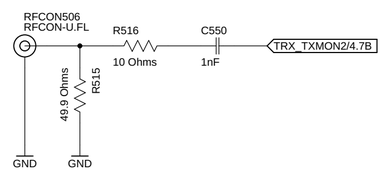

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| icyradio-main | |
| Joao Silva | |
| Sheet: 5/13 | RF Interface |
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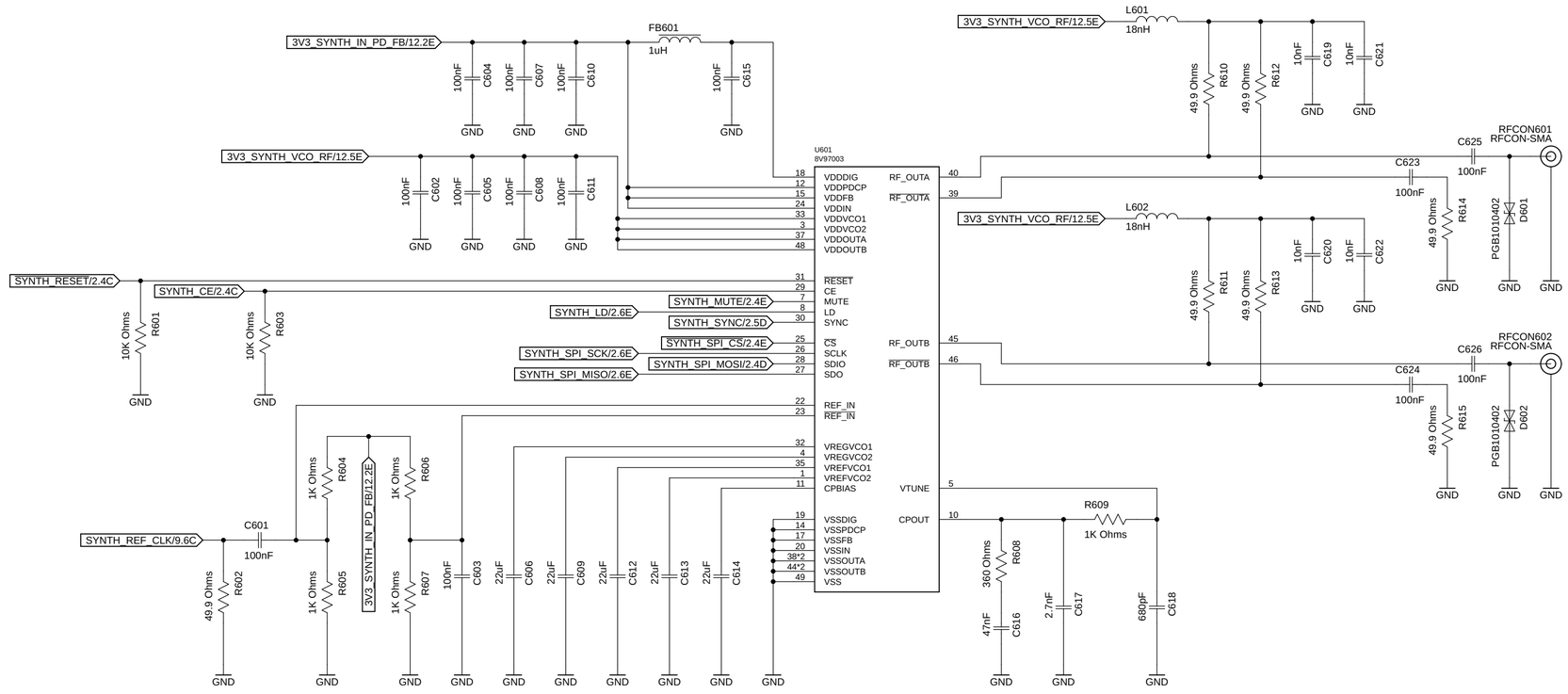


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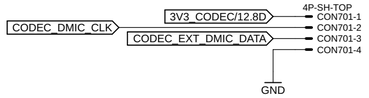
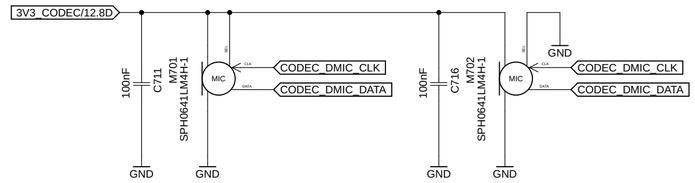
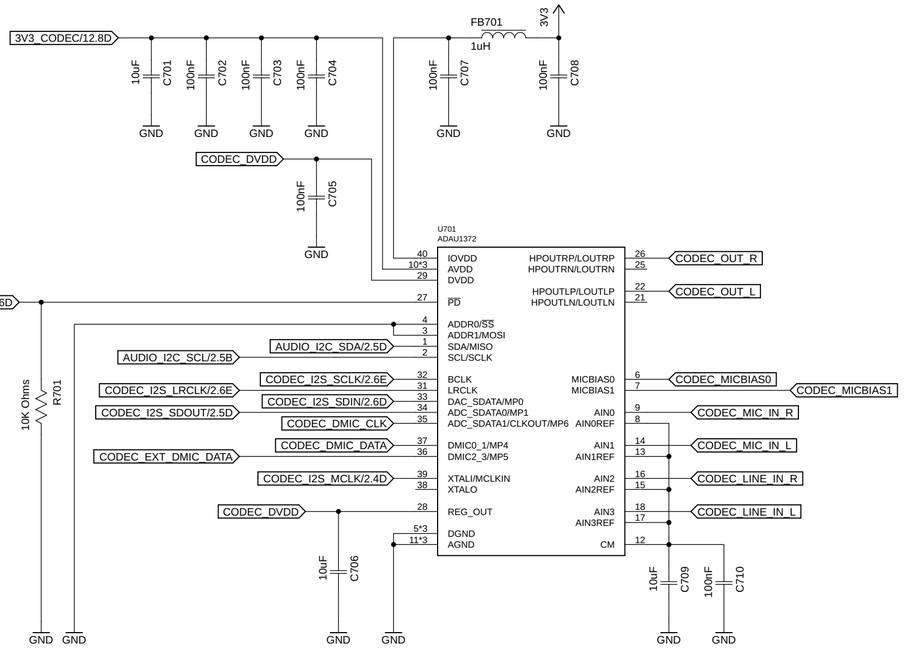
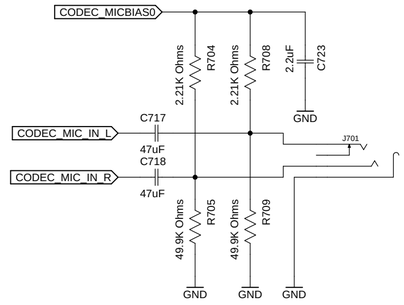
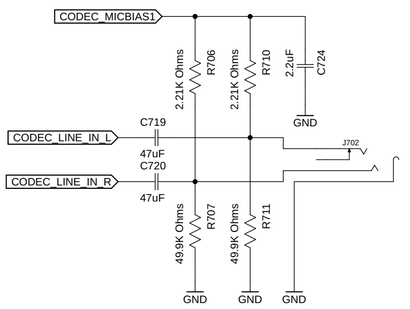
| Joao Silva | |
| Sheet: 6/13 | mmWave Synthesizer |
| Date: 13/01/23 22:59 | Rev: 2 |

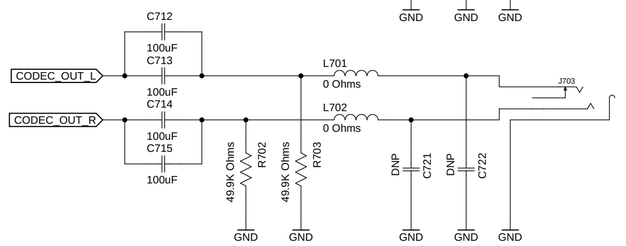
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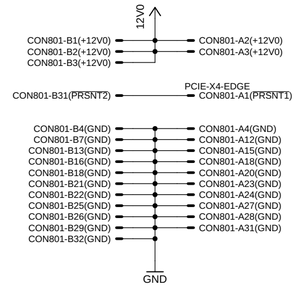


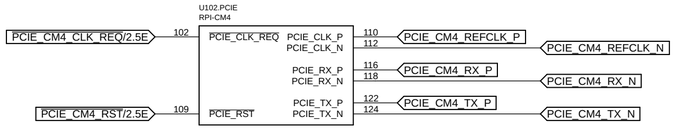


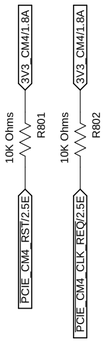





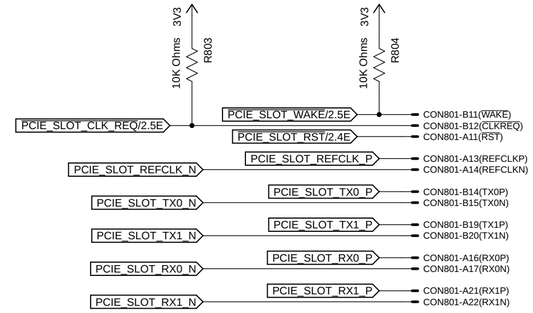


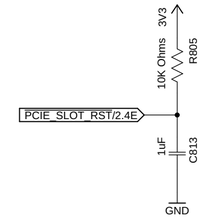


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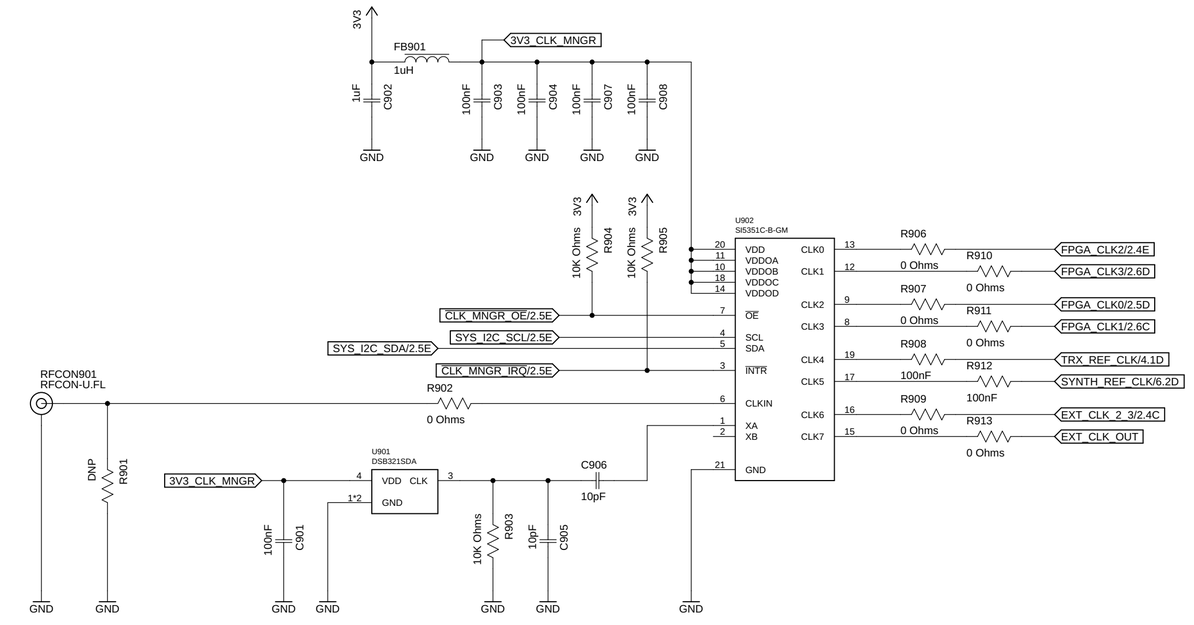


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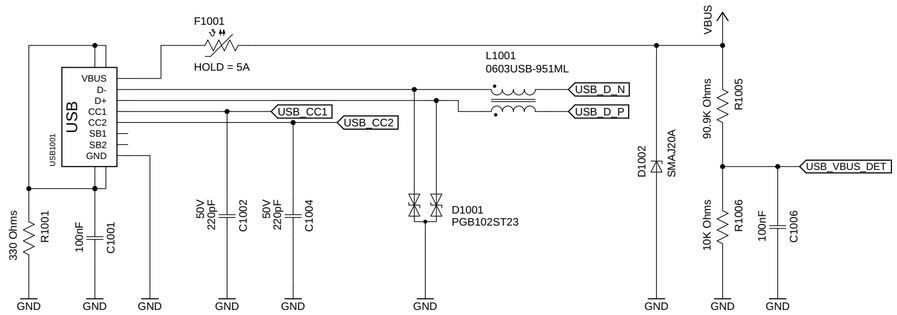


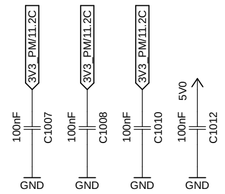


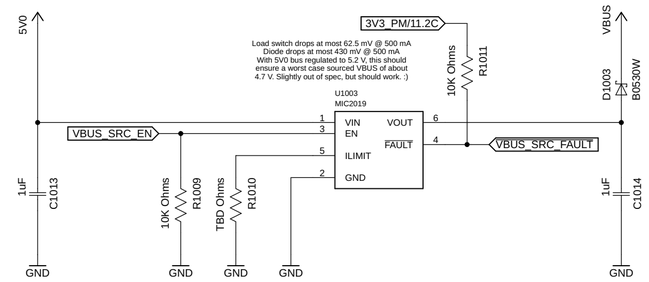


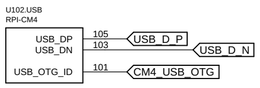


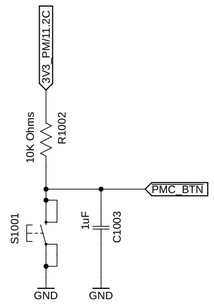


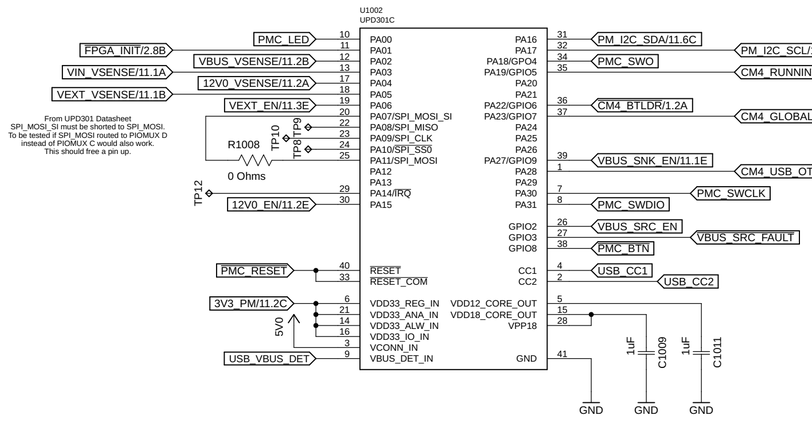


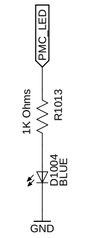


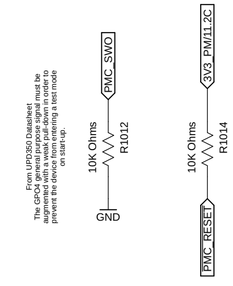


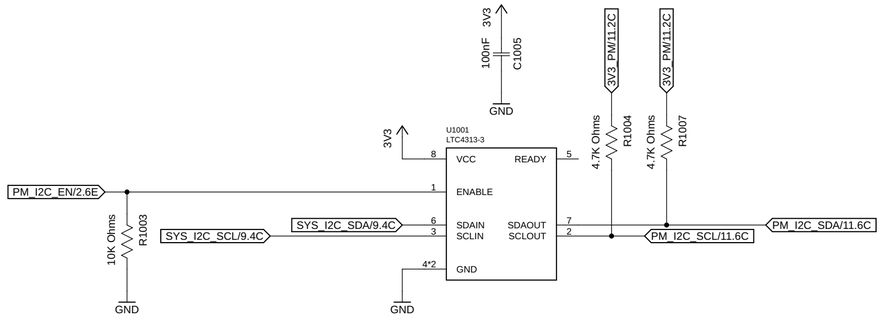


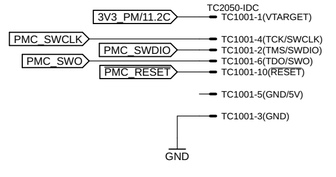


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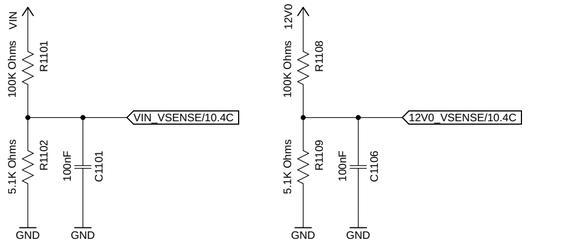





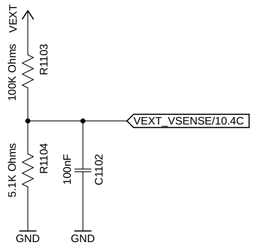


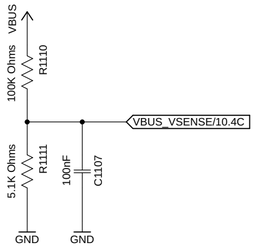


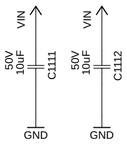


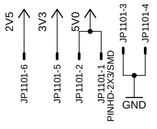


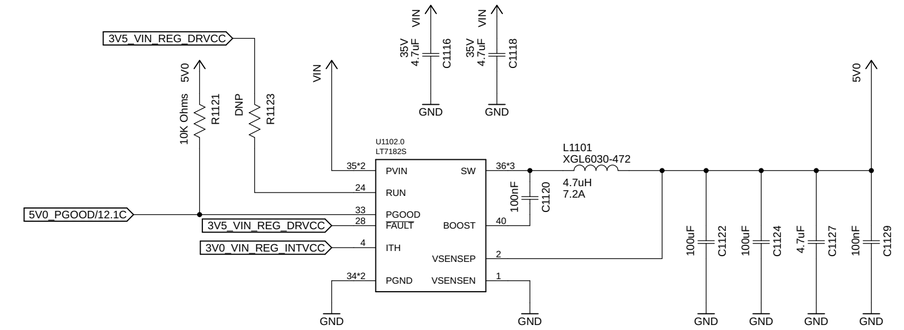


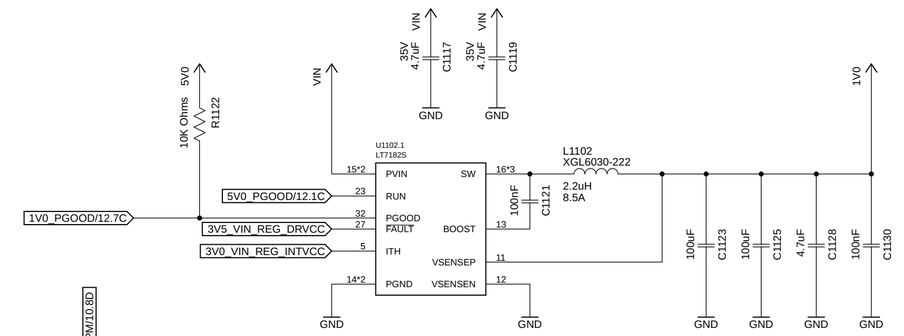





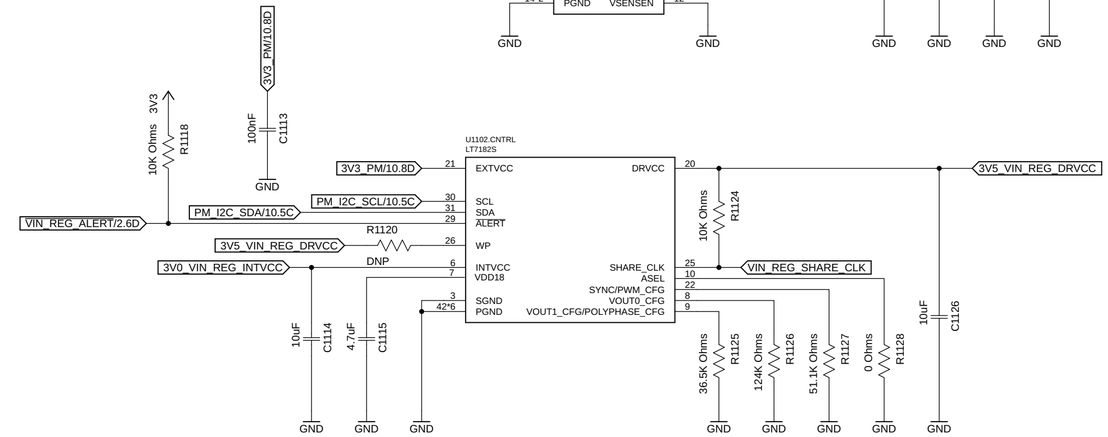


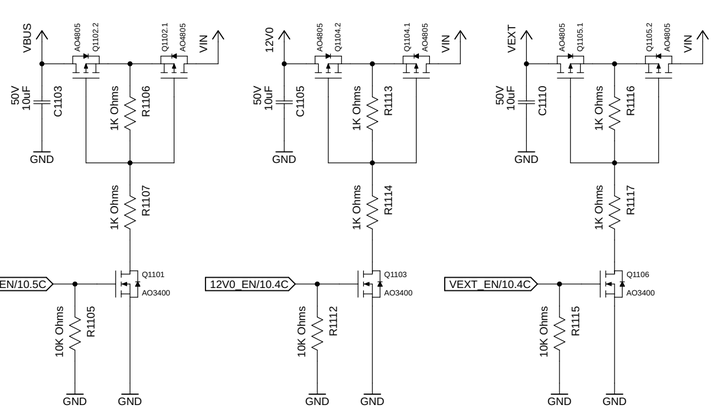


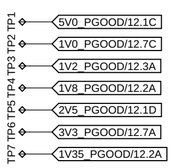


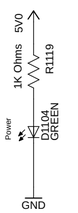


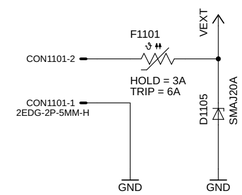


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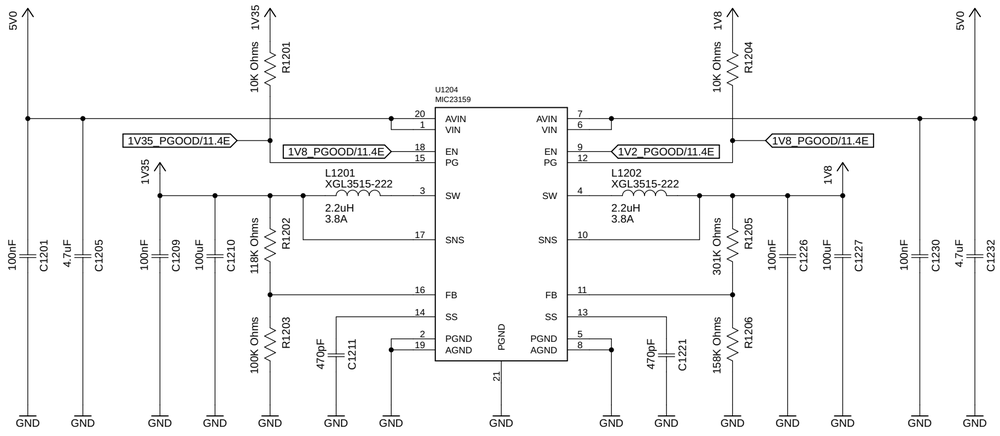


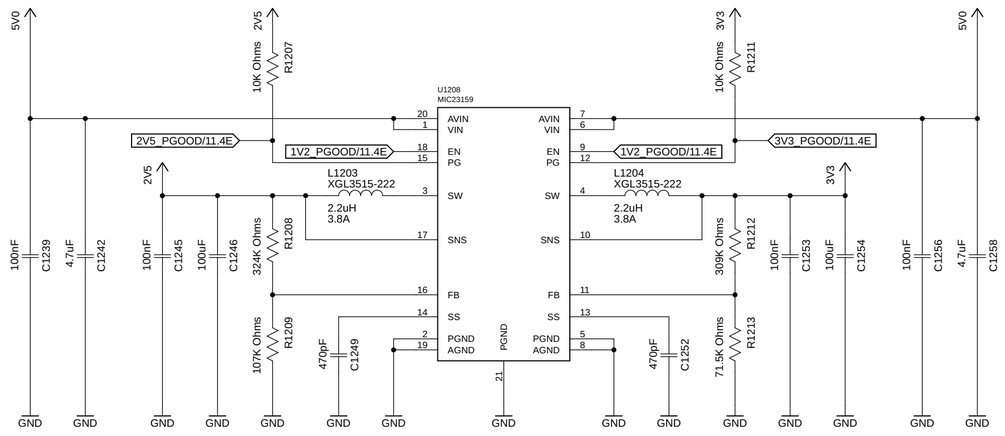


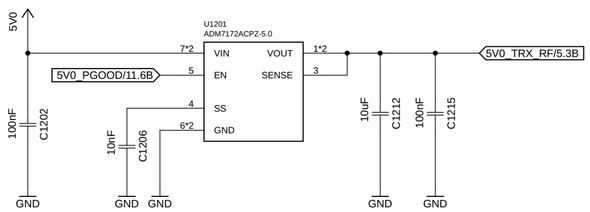


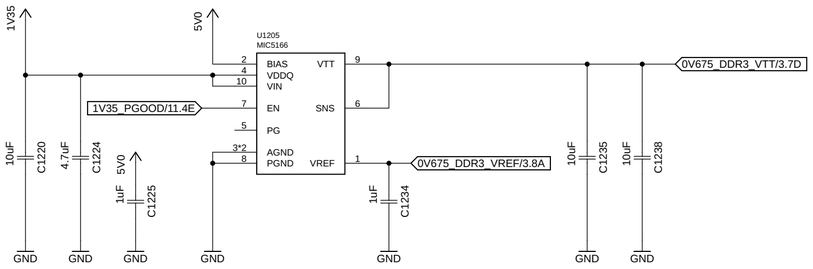


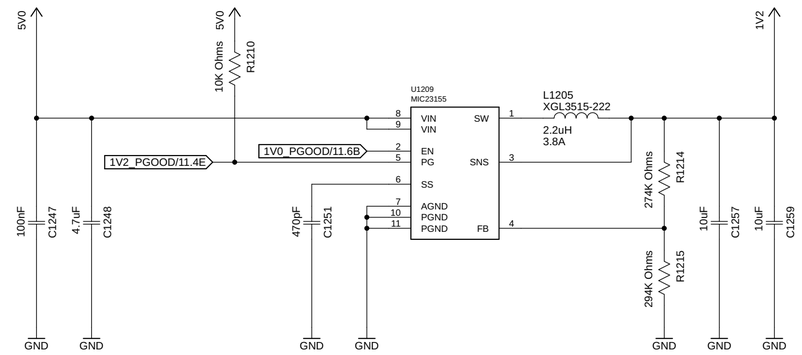


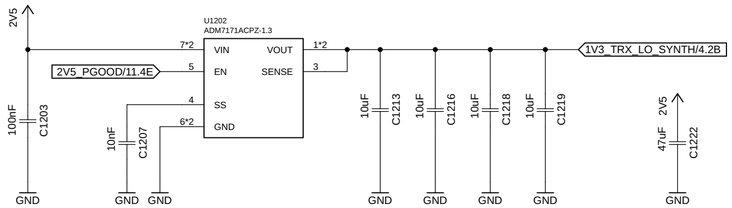


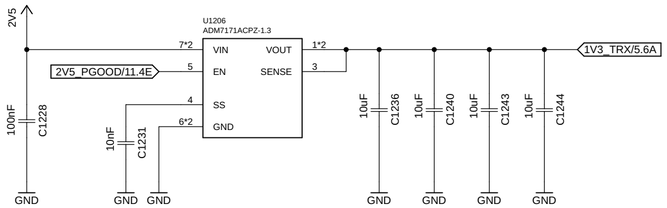


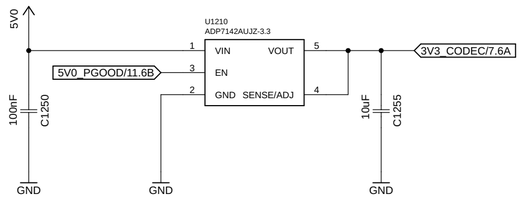


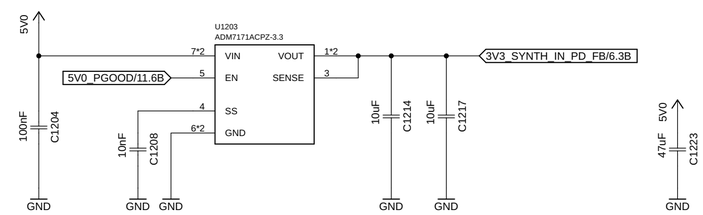


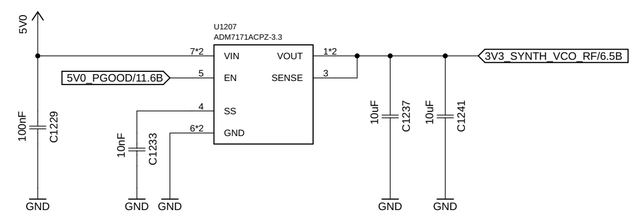


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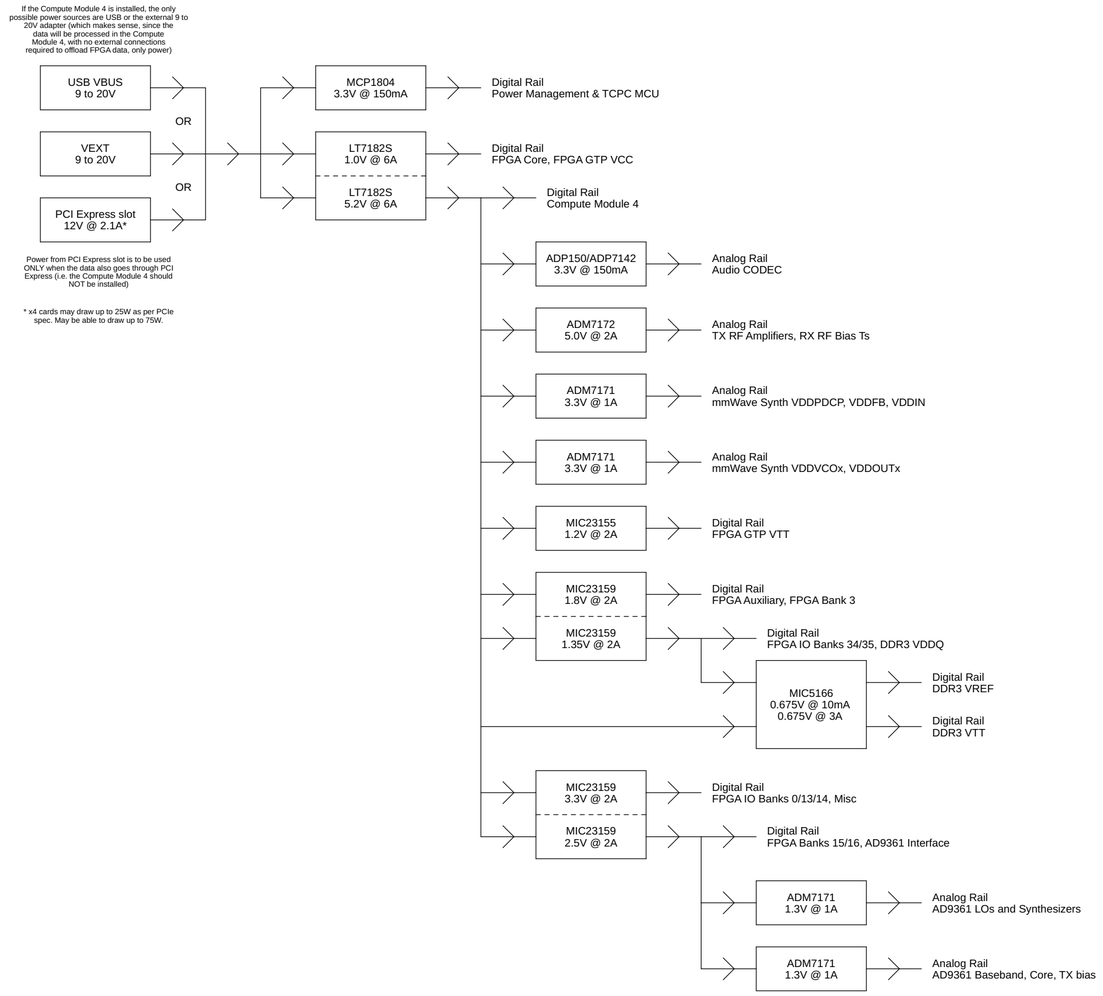
TODO:
- Review current requirements
- Check if the parts can supply the requested current

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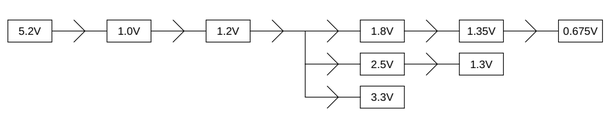


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