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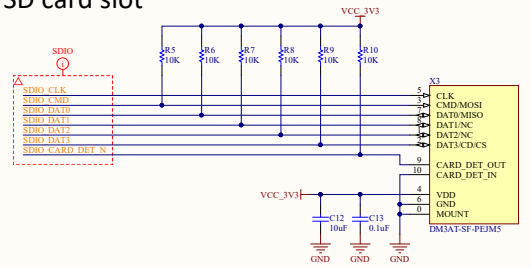
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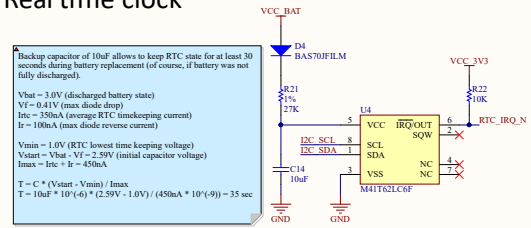
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| Title: P-board.Header | |
| File: 0_HEADER.SchDoc | Size: A4 |
| Drawn by: Vaagn Oganessian | Version: v1.1.0 |
| Date: 25.12.2021 Time: 20:08:29 | Sheet: 1 of 6 |

openIRV

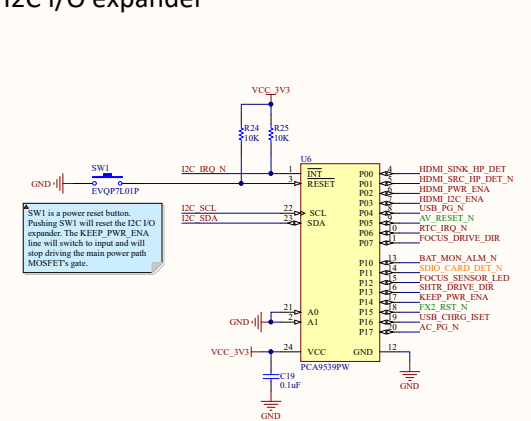
SD card slot



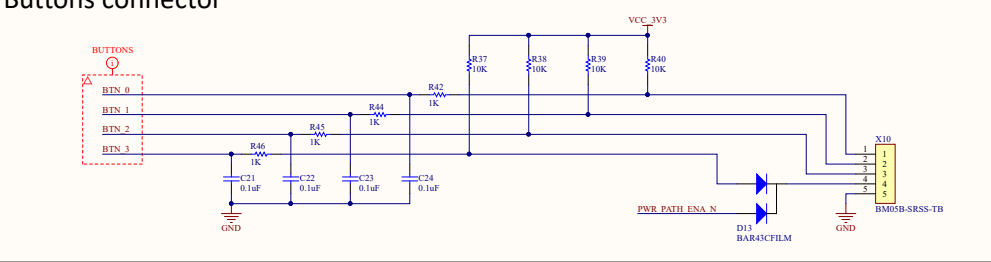
Real time clock



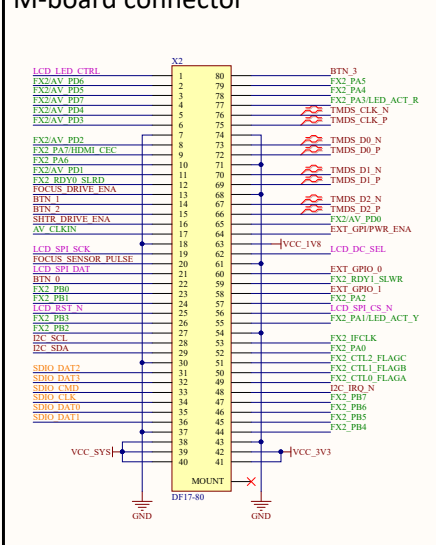
I2C I/O expander



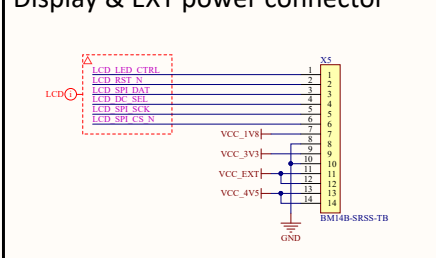
Buttons connector



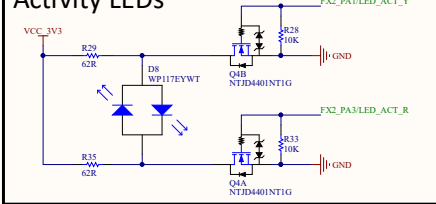
M-board connector



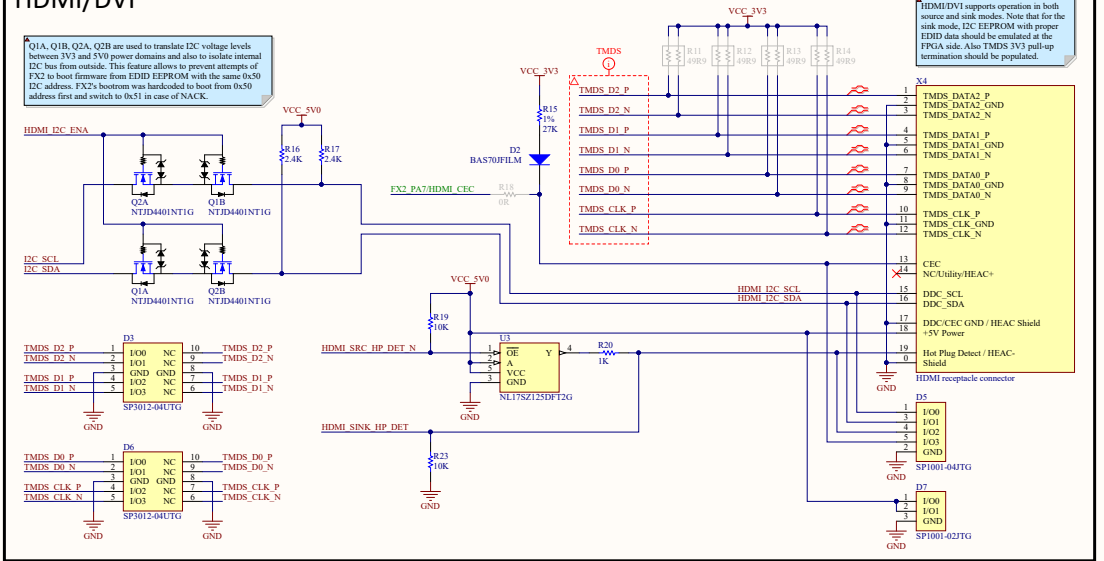
Display & EXT power connector



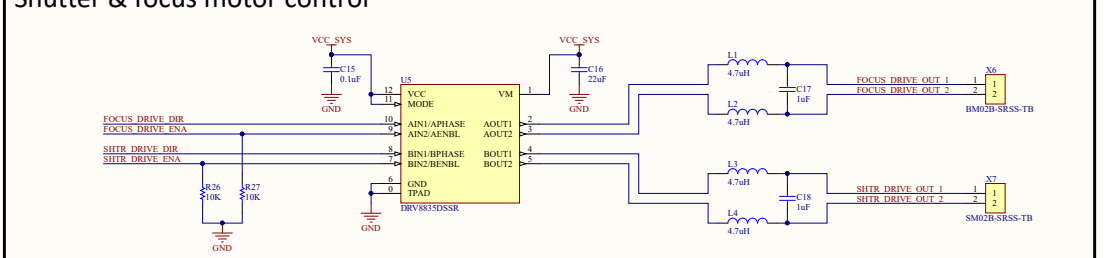
Activity LEDs



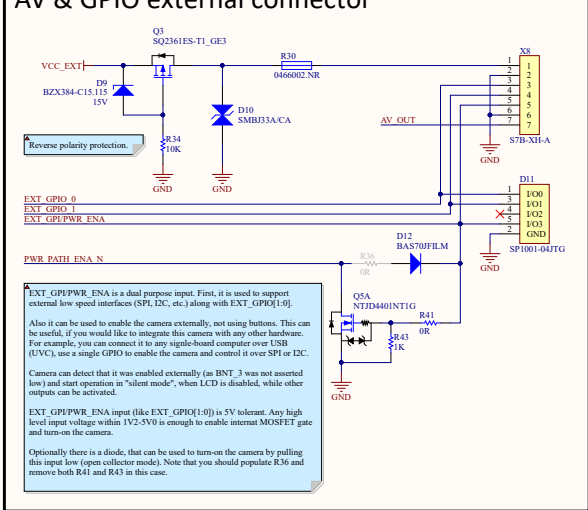
HDMI/DVI



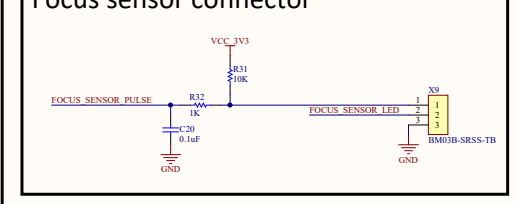
Shutter & focus motor control



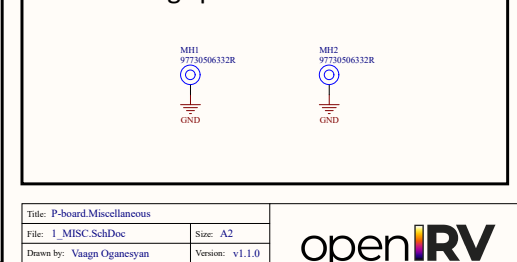
AV & GPIO external connector



Focus sensor connector



PCB stacking spacers

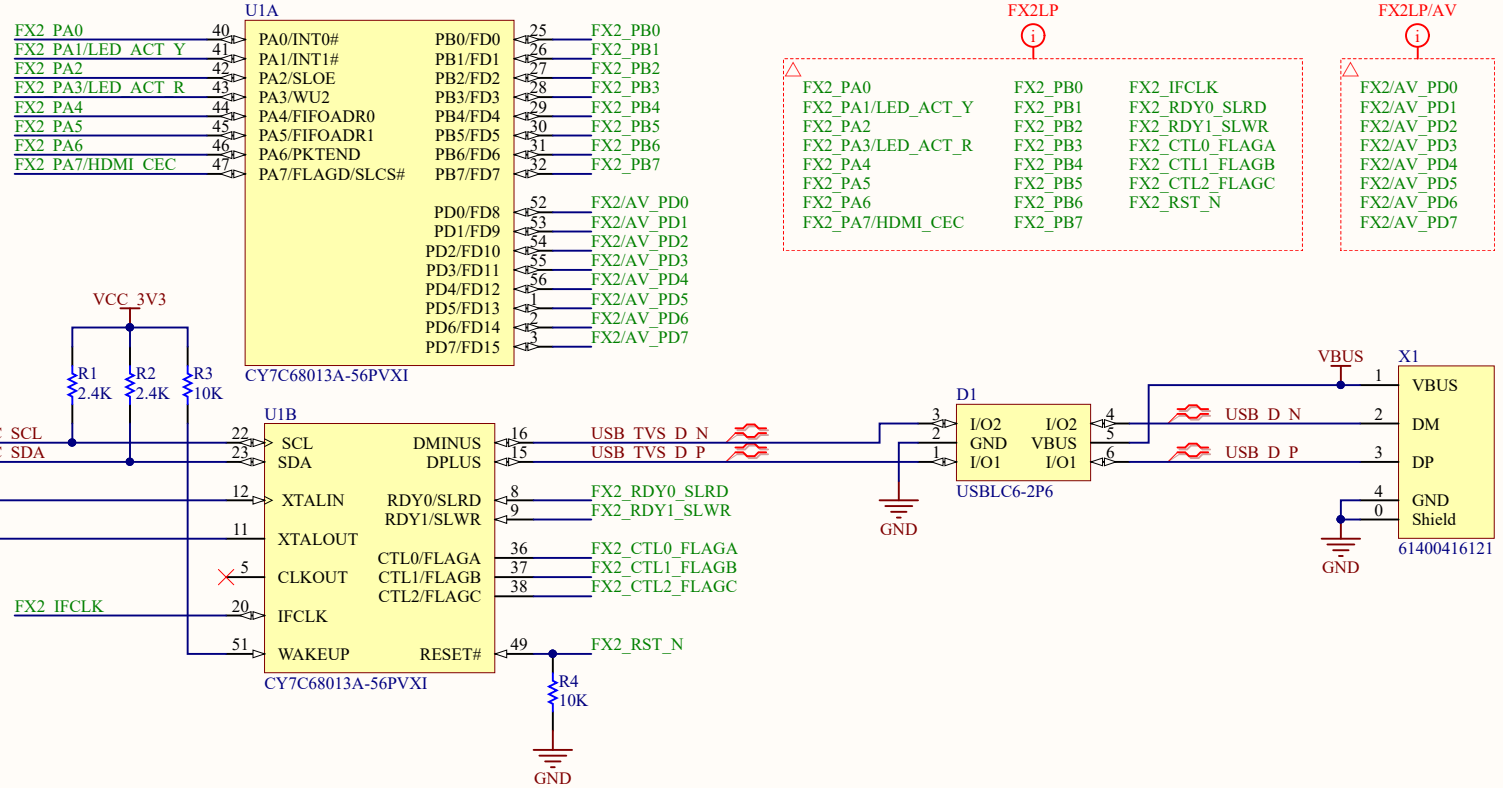


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| Title: P-board.Miscellaneous | File: 1_MISC.SchDoc | Size: A2 |
| Drawn by: Vaagn Oganesyan | Version: v1.1.0 | |
| Date: 25.12.2021 | Time: 20:08:29 | Sheet: 2 of 6 |

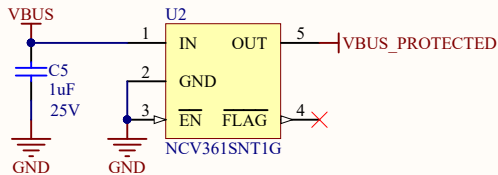
FX2LP I/O

Notes:

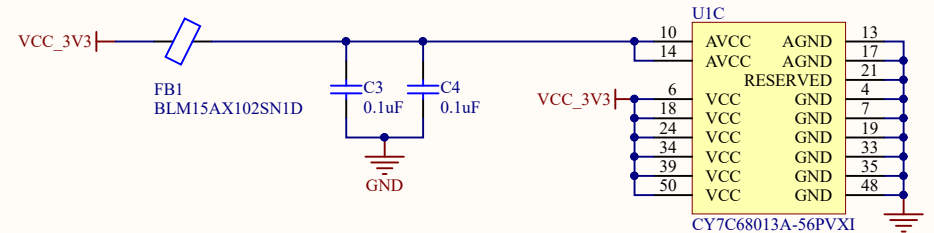
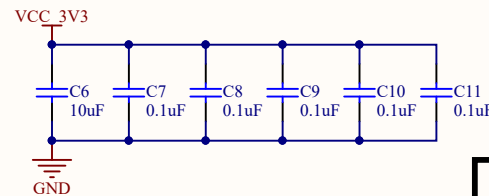
- FX2's EEPROM is emulated by FPGA and memory mapped to soft-MCU, that can copy FX2's firmware from the NOR-flash. Thus we can keep all firmware, bitstreams and etc. in a single non-volatile memory.
- FX2's D-port is shared with AV (analog video) encoder IC bus. Anyway USB and AV can both work simultaneously each over own 8-bit bus.
- Some flags and strobes of FX2 were not used in UVC (USB Video Class) application, but most important of them were connected to FPGA to keep FX2 capable to support any other applications in future.



USB power protection



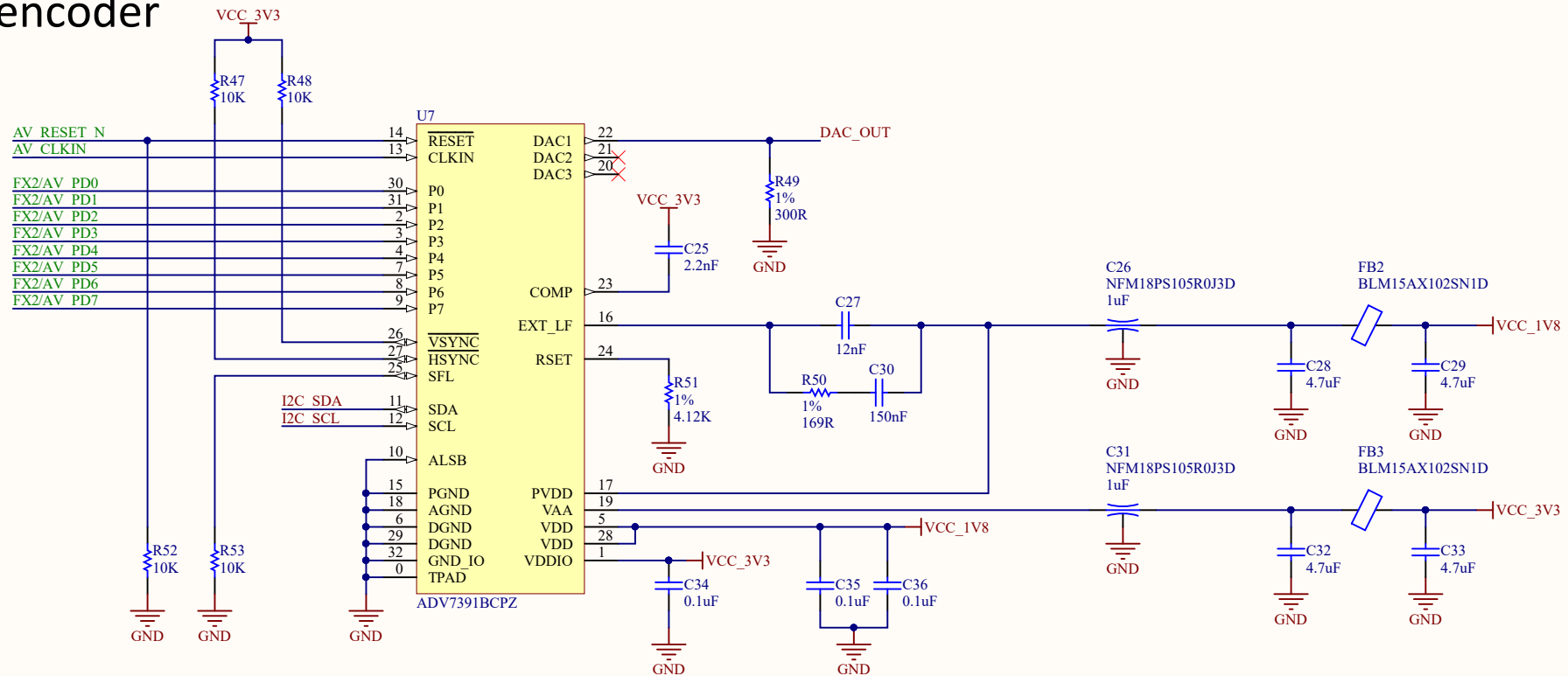
FX2LP power



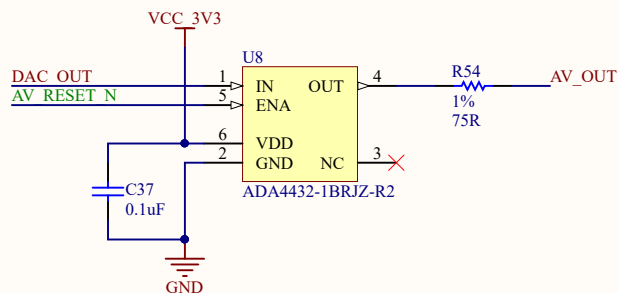
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| File: 2_USB.SchDoc | Size: A4 |
| Drawn by: Vaagn Oganessian | Version: v1.1.0 |
| Date: 25.12.2021 | Time: 20:08:30 |
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AV encoder



AV output buffer



Title: P-board.Analog Video

File: 3_AVIDEO.SchDoc

Size: A4

Drawn by: Vaagn Oganessian

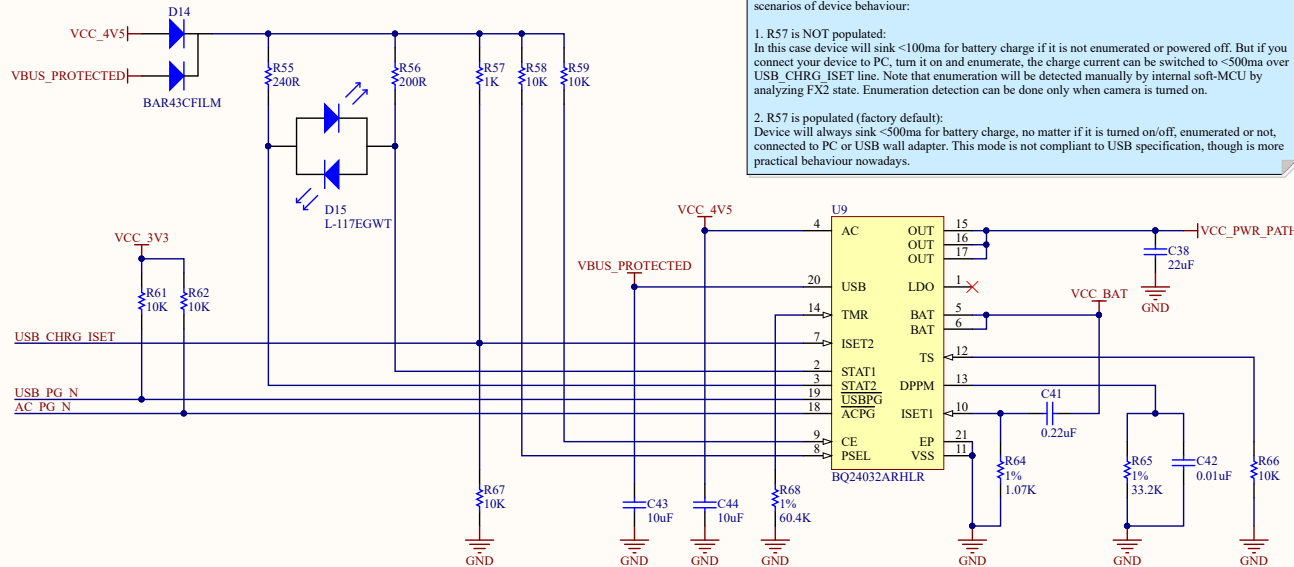
Version: v1.1.0

Date: 25.12.2021 Time: 20:08:30

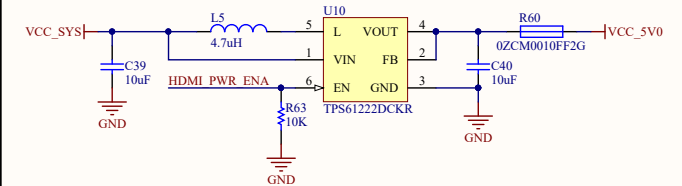
Sheet: 4 of 6

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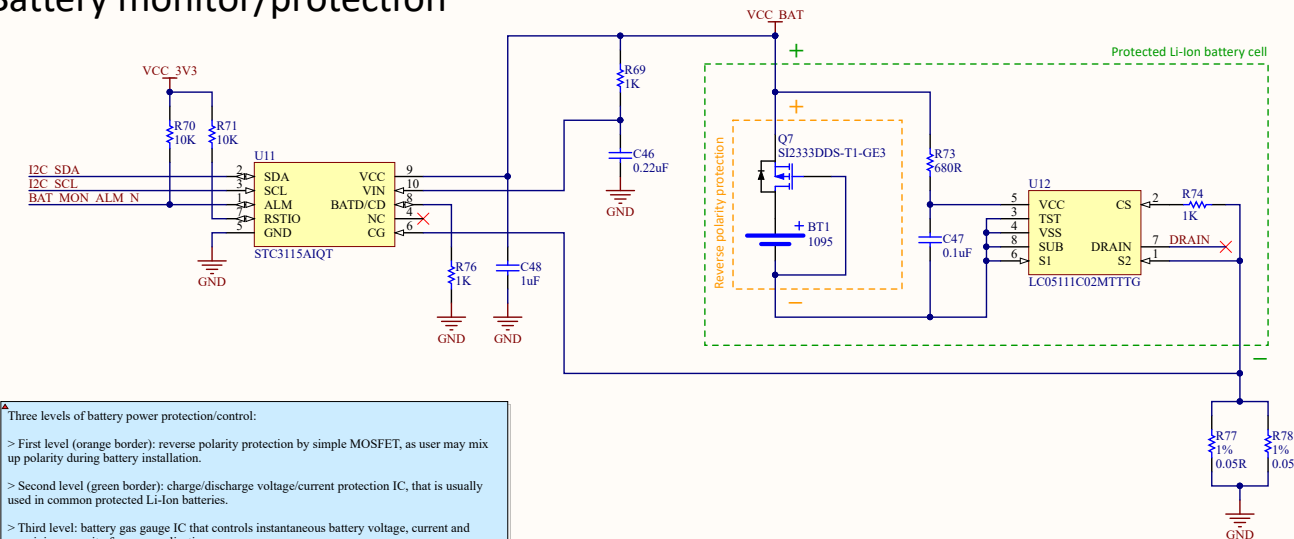
Battery charger



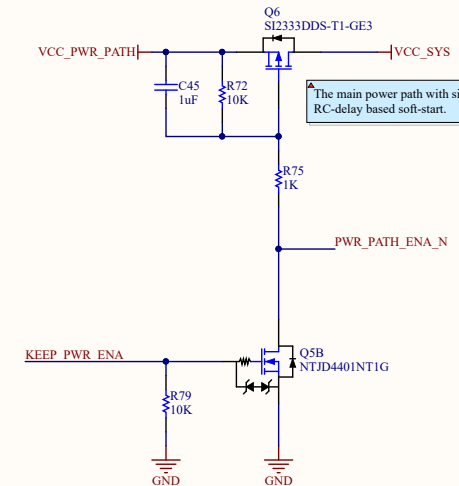
HDMI power 5V0



Battery monitor/protection



Power on circuit



v1.1.0

> public release

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|--|---------------------------------|---|
| Title: P-board.ChangeLog | | |
| File: 5_CHANGELOG.SchDoc | Size: A4 | |
| Drawn by: Vaagn Oganessian | Version: v1.1.0 | |
| Date: 25.12.2021 | Time: 20:08:30 | Sheet: 6 of 6 |

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