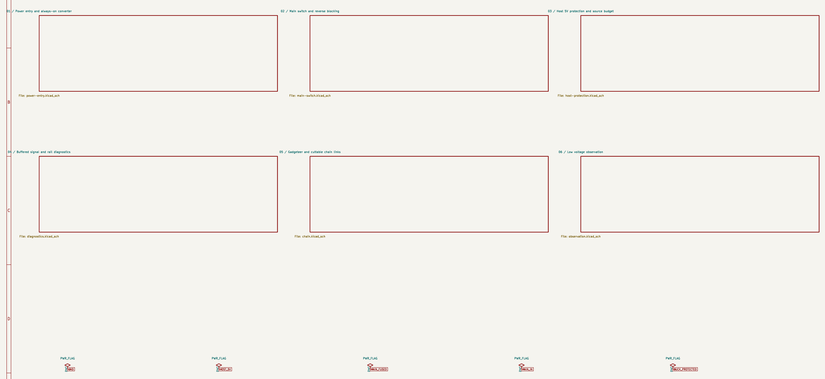


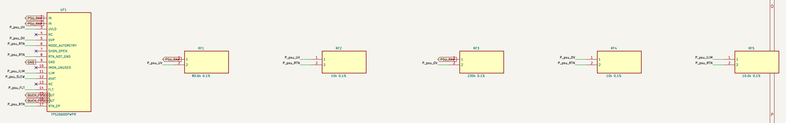
GND: externally connected common return.

HOST_5V: input from the host regulation shared 3 A platform capacity.

MAIN_FUSED: source selected through one mutually exclusive plug.

MAIN_5V: power transferred through Q5, verify Q5 orientation separately.

BUCK_PROTECTED: input power through F5 and D9; not a regulated rail.



UNFINISHED – NOT FOR FABRICATION

Smoothlevest / CERN-OHL-S-2.0

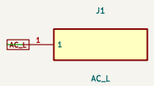
Sheet: /

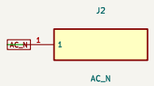
File: psu-kicad.sch

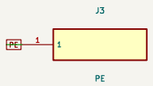
Title: Smoothle PSU connector / unfinished engineering study

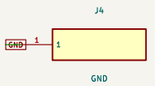
Size: A3	Date:	Rev: WIP
KiCad E.D.A. 9.0.8		Id: 1/7

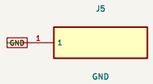
01 / Power entry and always-on converter / WIP — same-name global labels connect

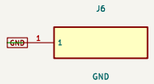


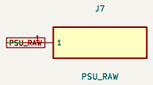


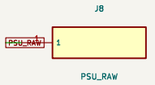


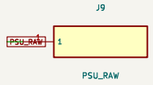


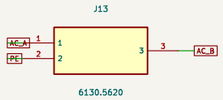




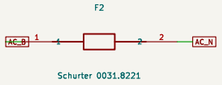


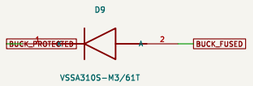


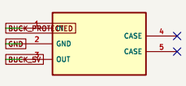


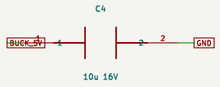


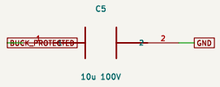


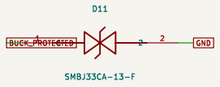


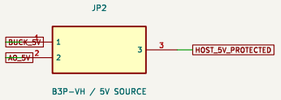












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Smoothieware / CERN-OHL-S-2.0

Sheet: /01 / Power entry and always-on converter/

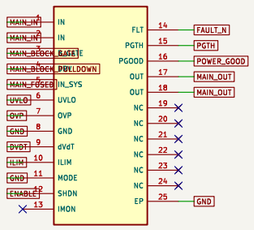
File: power-entry.kicad_sch

Title: 01 / Power entry and always-on converter

Size: A3	Date:	**Rev: WIP**
KiCad E.D.A. 9.0.8		Id: 2/7

02 / Main switch and reverse blocking / WIP — same-name global labels connect

U1



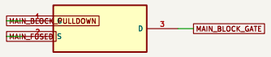
TPS26630RGER

Q5



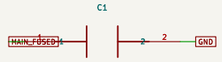
CSD19531Q5A

Q6



2N7002 / Nexperia

C1



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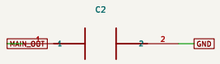
C2



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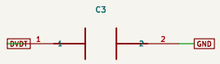
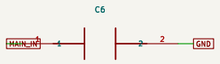
C3



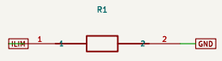
10n 50V

C6



1u 100V

R1



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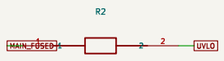
R2



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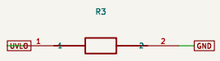
R3



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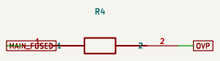
R4



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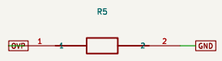
R5



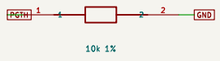
13.3k 1%

R6



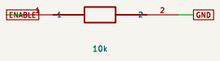
24.9k 1%

R7



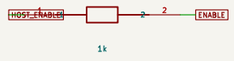
10k 1%

R8



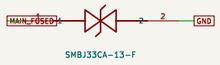
10k

R9



1k

D10



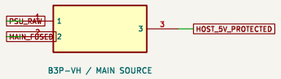
SMBJ33CA-13-F

D12



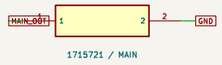
B560C-13-F

JP1



B3P-VH / MAIN SOURCE

J11



1715721 / MAIN

UNFINISHED — NOT FOR FABRICATION

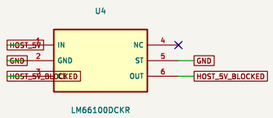
Smoothieware / CERN-OHL-S-2.0

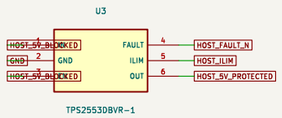
Sheet: /02 / Main switch and reverse blocking/
File: main-switch.kicad_sch

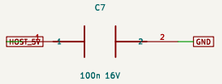
Title: 02 / Main switch and reverse blocking

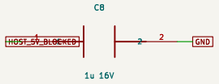
Size: A3	Date:	**Rev: WIP**
KiCad E.D.A. 9.0.8		Id: 3/7

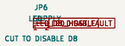
03 / Host 5V protection and source budget / WIP — same-name global labels connect

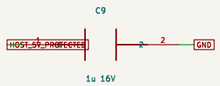


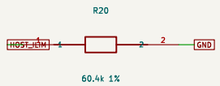


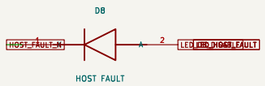




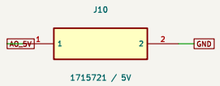


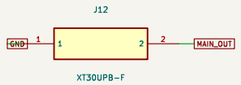












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Smoothieware / CERN-OHL-S-2.0

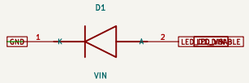
Sheet: /03 / Host 5V protection and source budget/

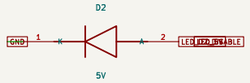
File: host-protection.kicad_sch

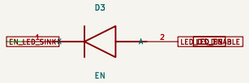
Title: 03 / Host 5V protection and source budget

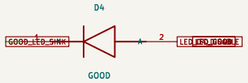
Size: A3	Date:	**Rev: WIP**
KiCad E.D.A. 9.0.8		Id: 4/7

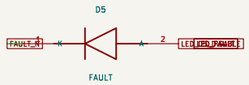
04 / Buffered signal and rail diagnostics / WIP — same-name global labels connect

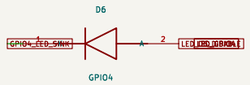


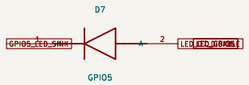


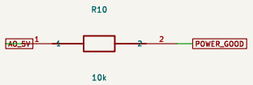


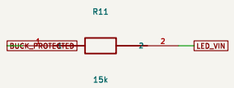


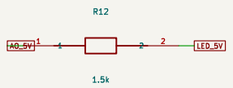


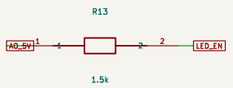


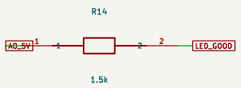


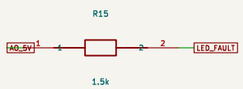


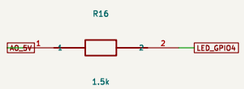


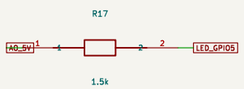


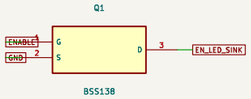


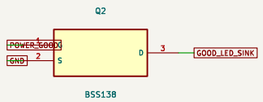


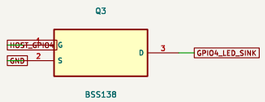


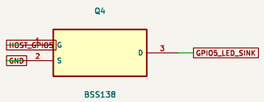












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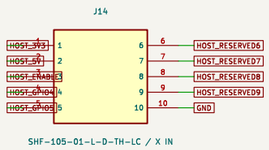
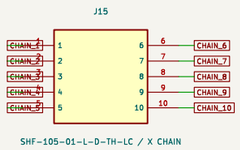
File: diagnostics.kicad_sch

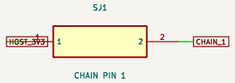
Title: 04 / Buffered signal and rail diagnostics

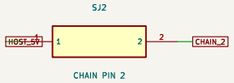
Size: A3	Date:	**Rev: WIP**
KiCad E.D.A. 9.0.8		Id: 5/7

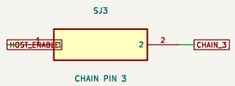
05 / Gadgeteer and cuttable chain links / WIP — same-name global labels connect

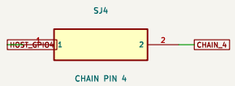


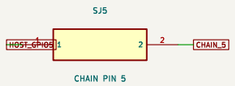


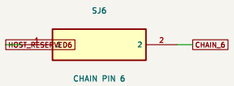


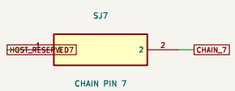


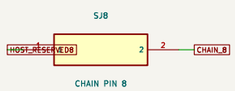


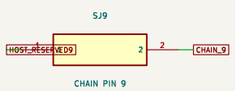


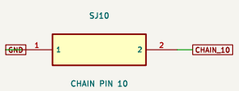


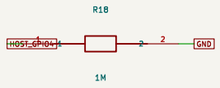


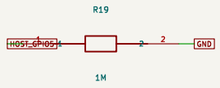












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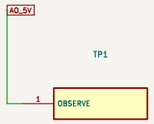
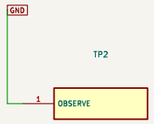
File: chain.kicad_sch

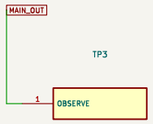
Title: 05 / Gadgeteer and cuttable chain links

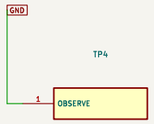
Size: A3	Date:	**Rev: WIP**
KiCad E.D.A. 9.0.8		Id: 6/7

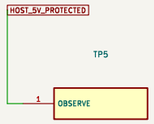
LOW VOLTAGE OBSERVATION ONLY — ISOLATE MAINS BEFORE PROBING

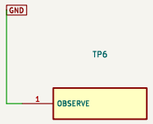












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Sheet: /06 / Low voltage observation/

File: observation.kicad_sch

Title: 06 / Low voltage observation — unqualified

Size: A3	Date:	**Rev: WIP**
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