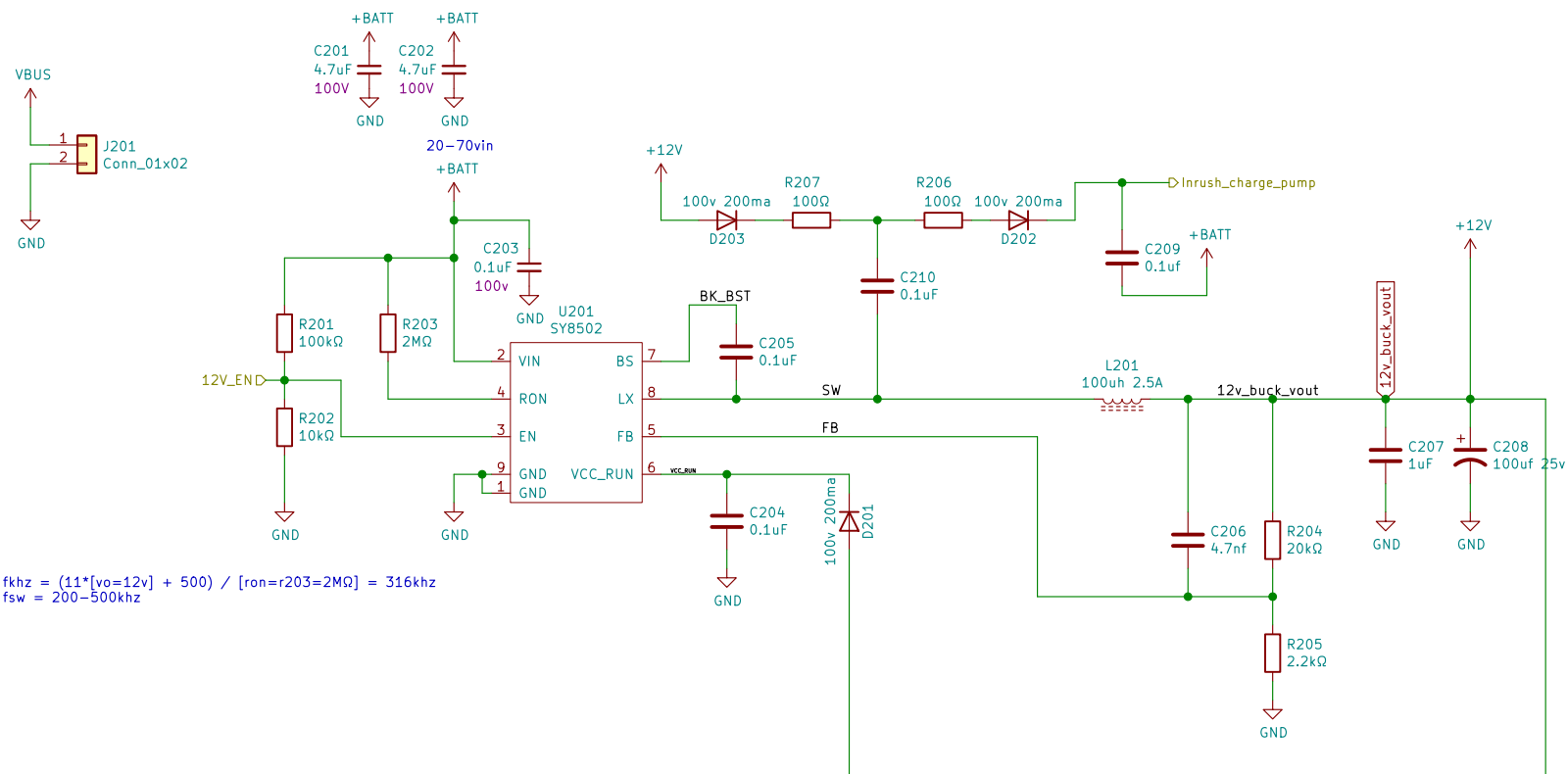


design for 1a out, 13 - 60vin



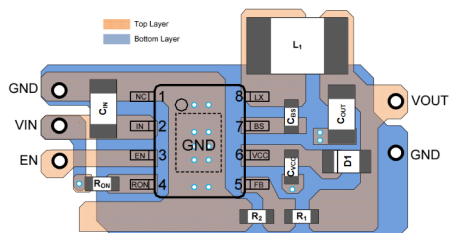
$$f_{kHz} = \frac{(11 \cdot [v_o = 12v] + 500)}{[r_{on} = r_{203} = 2M\Omega]} = 316kHz$$

$$f_{sw} = 200 - 500kHz$$

$$V_{out} = 1.2 \cdot (1 + R_{top}/R_{gnd})$$

$$1.2 \cdot (1 + (20k/2.2k)) = 12.11v$$

$$10.8v/22.2k = 49\mu A$$



alternates:
SY8502FCC, 85v, 1a, synchronous
TX4139, 75v, 2a, diode

Sheet: /50v to12v@1A/
File: 50v_to_12v_1A.kicad_sch

Title:

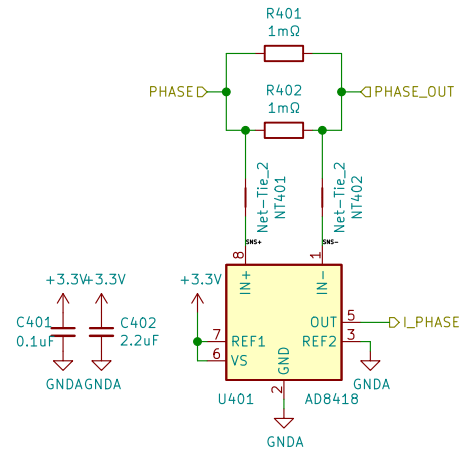
Size: A4

Date:

KiCad E.D.A. kicad (5.99.0-10633-g5f22025611)

Rev:

Id: 2/9



Sheet: /Phase A/Isense_Backup_shunts/
File: shunt_isense.kicad_sch

Title:

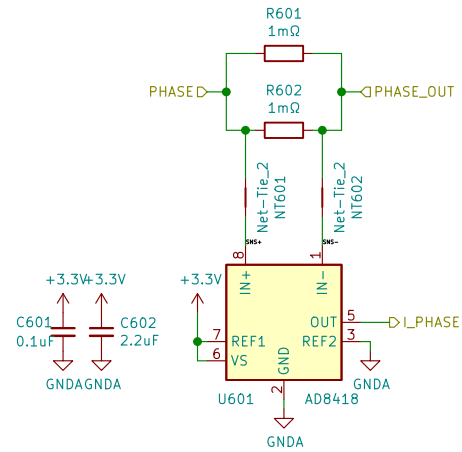
Size: A4

Date:

KiCad E.D.A. kicad (5.99.0-10633-g5f22025611)

Rev:

Id: 4/9



Sheet: /Phase B/Isense_Backup_shunts/
File: shunt_isense.kicad_sch

Title:

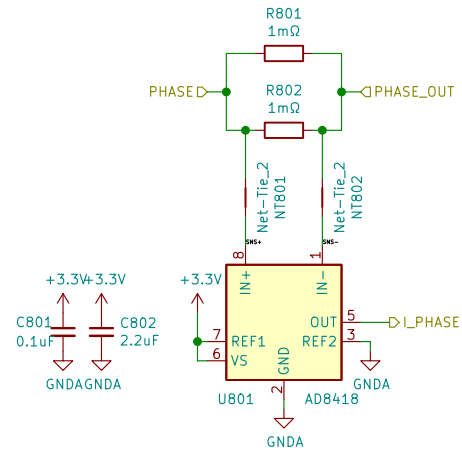
Size: A4

Date:

KiCad E.D.A. kicad (5.99.0-10633-g5f22025611)

Rev:

Id: 6/9



Sheet: /Phase C/Isense_Backup_shunts/
File: shunt_isense.kicad_sch

Title:

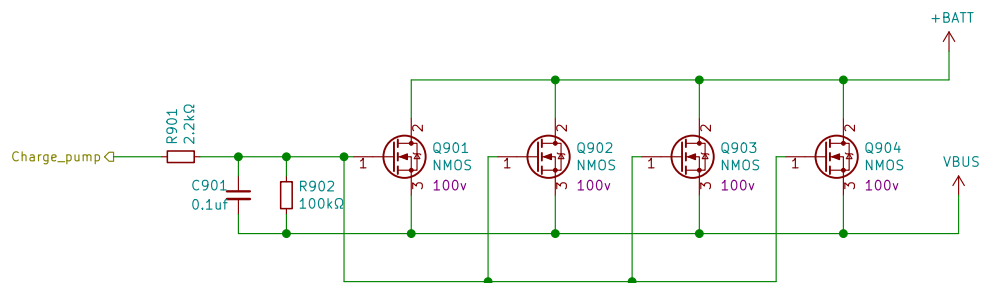
Size: A4

Date:

KiCad E.D.A. kicad (5.99.0-10633-g5f22025611)

Rev:

Id: 8/9



- H901 MountingHole
- H902 MountingHole

Sheet: /Inrush Limiter/
File: inrush_lim.kicad_sch

Title:

Size: A4	Date:	Rev:
KiCad E.D.A. kicad (5.99.0-10633-g5f22025611)		Id: 9/9