Supply schematic — EVLSTGAP3SXI_REV2

Top section (U3):
- VAUX — R47 0 — C38 N.M. — FB1/FB2 BLM21AG471SN1 — C37 1uF/50V — U3 MGJ2D051515BSC (+Vin 1, -Vin 2, +Vout 7, 0V 6, -Vout 5)
- N.M. R48 — C35 1uF/50V — C39 1uF/50V
- D8 BZT585B12T — R46 0 — R45 1K — Q5 2STF1360 — R44 0 — TP16 — VH_H
- D9 BZT585B15T — C36 4.7uF/50V — GNDISO_H
- R49 N.M — D10 BZT52C4V7T — C40 4.7uF/50V — TP17
- R50 0 — VL_H
- J4: VH_H 3, GNDISO_H 2, VL_H 1 — VH_H / VL_H

Middle section (U4):
- VAUX — R54 0 — C43 N.M. — FB3/FB4 BLM21AG471SN1 — C44 1uF/50V — U4 MGJ2D051515BSC (+Vin 1, -Vin 2, +Vout 7, 0V 6, -Vout 5)
- N.M. R55 — C41 1uF/50V — C45 1uF/50V
- D11 BZT585B12T — R53 0 — R52 1K — Q6 2STF1360 — R51 0 — TP18 — VH_L
- D12 BZT585B15T — C42 4.7uF/50V — GNDISO_L
- R56 N.M — D13 BZT52C4V7T — C46 4.7uF/50V — TP19
- R57 0 — VL_L
- J5: VH_L 3, GNDISO_L 2, VL_L 1 — VH_L / VL_L

Bottom section (U5):
- VAUX — U5 LDK220M-R (VIN 1, EN 3, GND 2, VOUT 5, ADJ 4)
- C47 10uF/25V
- R58 N.M. — VDD
- R59 0 — C48 10uF/25V
- R60 4.7k
- R61 1.47k
- R62 1.18k — JR1 0

Board Title: EVLSTGAP3SXI_REV2
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Board Title: EVLSTGAP3SXI_REV2

Sheet Title: Gate Driver

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VP1 FULL
VP2 EMPTY
VP3 EMPTY
VP4 EMPTY

U1 STGAP3SXI
GND, IN+, IN-, RDY, DIAG, RST, VDD, GND
VL, CLAMP, GOUT, VH, SOFTOFF, GNDISO, DESAT, VL

U2 STGAP3SXI
GND, IN+, IN-, RDY, DIAG, RST, VDD, GND
VL, CLAMP, GOUT, VH, SOFTOFF, GNDISO, DESAT, VL

HV

R1 10M
R2 10M
C1 N.M. Electr. P 7.5/10
C2 N.M.
C3 N.M.
C4 3u3/1.1kV
C7 N.M.
C8 N.M.

C5 1uF/50V
C6 100nF/50V
C9 1uF/50V
C10 100nF/50V
GNDISO_H

Q1 STGW40H120DF2
Q1A N.M.
G_HS
OUT

Q3 STL7N6F7
Q4 STL7N6F7

Q2 STGW40H120DF2
Q2A N.M.
G_LS
OUT

J1
1 IN+_HS
2 IN+_LS
3 nRST
4 GND
5 VAUX

J2
1 IN+_HS
2 IN-_HS
3 IN+_LS
4 IN-_LS
5 GND
6 VDD
7 VAUX

J3
1 nRST
2 RDY-H
3 RDY-L
4 DIAG-H
5 DIAG-L
6 GND