Output MOSFET stage

- H1 Output−, H2 Output−, H3 Output−, H4 Output−, H10 Output−
- IRL40SC228 Q1, IRL40SC228 Q2, IRL40SC228 Q3, IRL40SC228 Q4
- R19 43, R22 43, R23 43, R24 43
- D1 DDZ9705S, D2 DDZ9705S, D3 DDZ9705S, D4 DDZ9705S
- GND
- GateMOSFET
- R25 EP5WS100RJ
- VnachMOSFET
- D5 SLD8S17A
- D6 1N5336
- GND

Input headers

- H6 InputV−, H7 InputV−, H8 InputV−, H9 InputV−
- GND

Gate driver / power

- R27 330
- PS1 IRS44273LTRPBF
- GateDriver
- IN, COM, OUT_1, OUT_2, VCC
- GateMOSFET
- GND
- C6 22u
- C5 UHE1E472
- VCC
- R29 8k
- InputV+
- R30 2k
- D8 PDZ4.7BGWJ
- D9 DDZ9705S
- R28 10
- H5 InputV+
- D7 SLD8S15A
- GND

U3 NCP1117DT33RKG

- VCC, VI, GND, VO, +3.3V
- C3 10u, C4 10u
- GND

U1 INND-TS40YGCB

Signal	Resistor	Value	Pin	Segment
A1	R2	1.5k	10	A
B1	R3	1.5k	9	B
C1	R5	1.5k	8	C
D1	R6	1.5k	5	D
E1	R7	1.5k	1	E
F1	R8	1.5k	2	F
G1	R9	1.5k	3	G
DP1		1.5k	7	DP

- CC 6
- GND

U2 INND-TS40RCB

Signal	Resistor	Value	Pin	Segment
A2	R10	1.5k	10	A
B2	R11	1.5k	9	B
C2	R12	1.5k	8	C
D2	R13	1.5k	5	D
E2	R14	1.5k	1	E
F2	R15	1.5k	2	F
G2	R16	1.5k	3	G
DP2	R17	1.5k	7	DP

- CC 6
- GND

IC1 STM32G081KBT6

Top pins: 32 PB8, 31 PB7, 30 PB6, 29 PB5, 28 PB4, 27 PB3, 26 PA15, 25 PA14-BOOT0

- SWCLK, R26 100k, GND
- G1, F1, A1, B1, DP1

Left pins:
- 1 PB9 — D1
- 2 PC14-OSC32_IN
- 3 PC15-OSC32_OUT
- 4 VDD/VDDA — +3.3V, C1 2.2u, GND
- 5 VSS/VSSA
- 6 PF2-NRST — NRST
- 7 PA0 — Button1
- 8 PA1 — Button2

Right pins:
- 24 PA13 — SWDIO
- 23 PA12_[PA10] — GateDriver
- 22 PA11_[PA9] — D2
- 21 PA10 — G2
- 20 PC6 — F2
- 19 PA9 — E2
- 18 PA8 — A2
- 17 PB2 — B2

Bottom pins:
- 9 PA2 — USART2_TX
- 10 PA3 — USART2_RX
- 11 PA4 — VnachMOSFET
- 12 PA5
- 13 PA6
- 14 PA7 — InputV+
- 15 PB0 — DP2
- 16 PB1 — C2

Reset

- SW3 ButtonRST
- C2 100n
- NRST
- GND

Connectors

- SWCLK / SWDIO — J1 Conn_01x02
- USART2_TX / USART2_RX — J2 Conn_01x02

Buttons

- +3.3V, R1 22k, SW1 Button1, R20 1.5k, GND, Button1
- +3.3V, R18 22k, SW2 Button2, R21 1.5k, GND, Button2