IC201
LM2675

24V_AUX/1.3A

V_IN   FB
        CB   C201
ON/OFF V_SW   10nF   L201
        GND   68uH   +12V

C202   C203
100nF   100uF/25V

D201   C204   C205
SS14   100uF/25V   100nF

R201
15K

R202
1.3K

GND GND GND   GND   GND GND   GND

V201

+12V   +VOUT   7   +15V
        1   +VIN
                    COM   6   AGND
        2   -VIN
                    -VOUT   5   -15V
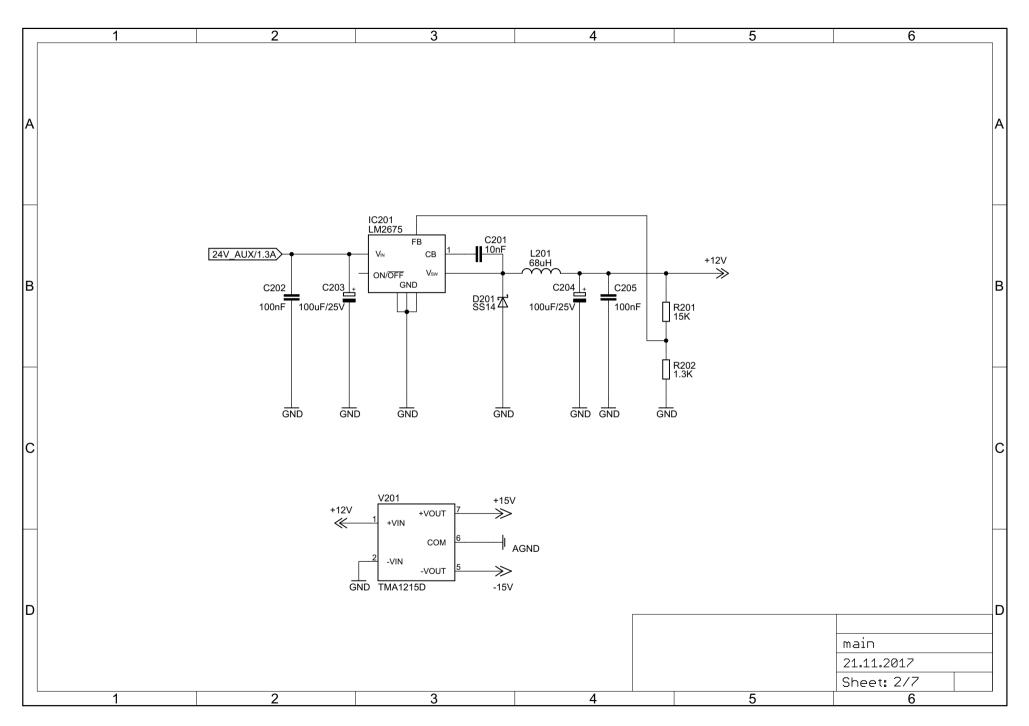
GND   TMA1215D

main

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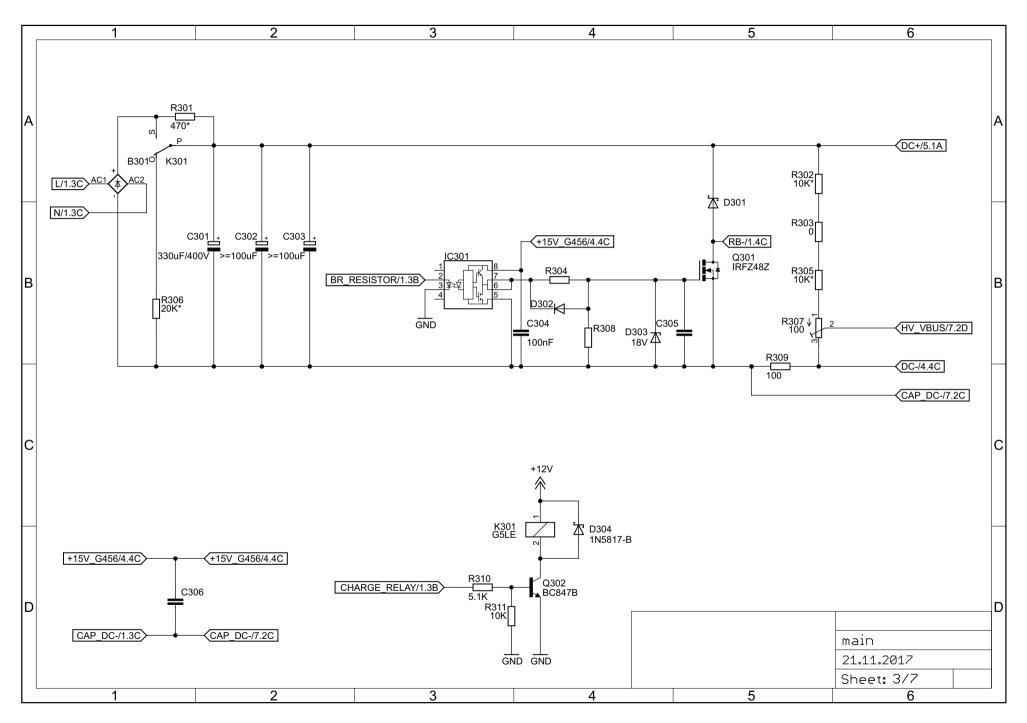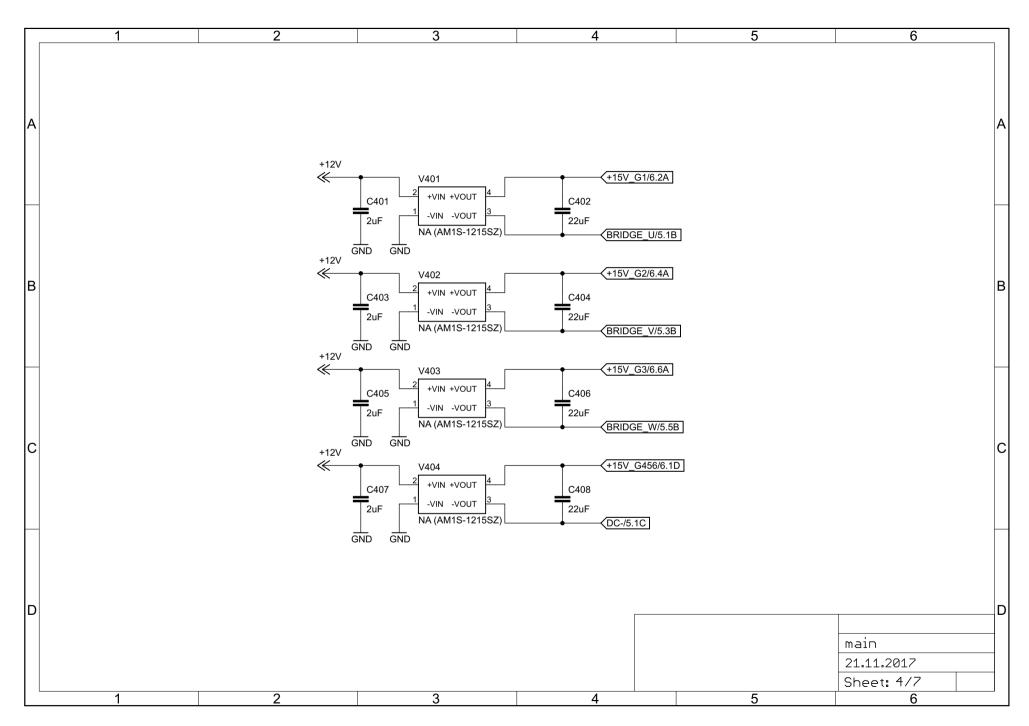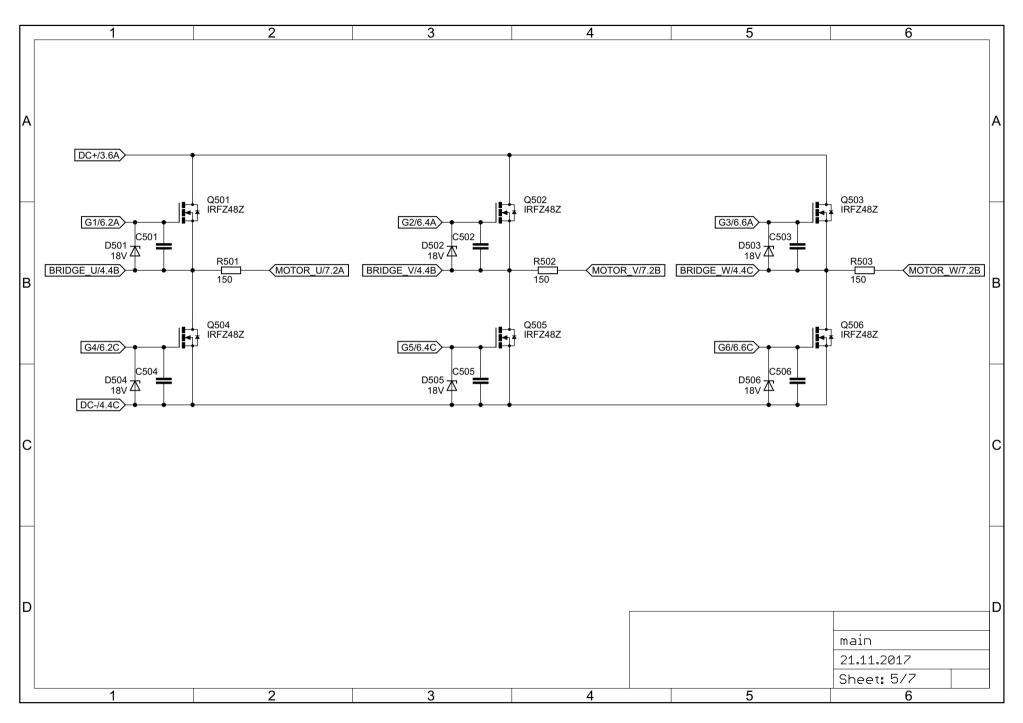21.11.2017 г. 20:56:34 ч. D:\Developments\Elektronika\Motor Control\Projects\FOC Servo\Scheme and Board\Power Stage\v.0.0.0\main.sch (Sheet: 2/7)

A

R301
470*

S
P
B301 K301

L/1.3C AC1 + AC2
N/1.3C -

DC+/5.1A

R302
10K*

R303
0

C301 + C302 + C303 +

+15V_G456/4.4C

330uF/400V >=100uF >=100uF

D301

RB-/1.4C

Q301
IRFZ48Z

IC301

R304

R305
10K*

R306
20K*

BR_RESISTOR/1.3B

1 8
2 7
3 6
4 5

GND

D302

C304
100nF

R308

D303
18V

C305

R307
100

1
2
3

HV_VBUS/7.2D

R309

DC-/4.4C

100

CAP_DC-/7.2C

B

C

+12V

K301
G5LE

D304
1N5817-B

+15V_G456/4.4C +15V_G456/4.4C

1
2

C306

CHARGE_RELAY/1.3B R310

Q302
BC847B

5.1K

R311
10K

CAP_DC-/1.3C CAP_DC-/7.2C

GND GND

D

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+12V

V401
2 +VIN +VOUT 4
1 -VIN -VOUT 3
NA (AM1S-1215SZ)

C401
2uF

GND GND

C402
22uF

+15V_G1/6.2A

BRIDGE_U/5.1B

+12V

V402
2 +VIN +VOUT 4
1 -VIN -VOUT 3
NA (AM1S-1215SZ)

C403
2uF

GND GND

C404
22uF

+15V_G2/6.4A

BRIDGE_V/5.3B

+12V

V403
2 +VIN +VOUT 4
1 -VIN -VOUT 3
NA (AM1S-1215SZ)

C405
2uF

GND GND

C406
22uF

+15V_G3/6.6A

BRIDGE_W/5.5B

+12V

V404
2 +VIN +VOUT 4
1 -VIN -VOUT 3
NA (AM1S-1215SZ)

C407
2uF

GND GND

C408
22uF

+15V_G456/6.1D

DC-/5.1C

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HIC701
CRCS.P6.02

K1 HCPL-7840 K2 TL082A K3 TL082B +15V

+15V_G1/6.2A — 1 — VCC1
MOTOR_U/5.2B — 2 — IN
BRIDGE_U/6.2B — 3 — GNDI

5 +15V
7 OUT → CURRENT_A/1.3A
4 GNDO
6 -15V

Uout = -Uin * (K1 * K2 * K3)   -15V

HIC702
CRCS.P6.02

K1 HCPL-7840 K2 TL082A K3 TL082B +15V

+15V_G2/6.4A — 1 — VCC1
MOTOR_V/5.4B — 2 — IN
BRIDGE_V/6.4B — 3 — GNDI

5 +15V
7 OUT → CURRENT_B/1.3A
4 GNDO
6 -15V

Uout = -Uin * (K1 * K2 * K3)   -15V

HIC703
NA (CRCS.P6.02)

K1 HCPL-7840 K2 TL082A K3 TL082B +15V

+15V_G3/6.6A — 1 — VCC1
MOTOR_W/5.6B — 2 — IN
BRIDGE_W/6.6B — 3 — GNDI

5 +15V
7 OUT → CURRENT_C/1.3A
4 GNDO
6 -15V

Uout = -Uin * (K1 * K2 * K3)   -15V

HIC704
CRCS.P11.05

K1 HCPL-7840 K2 TL082A K3 TL082B +15V

+15V_G456/6.6C — 1 — VCC1
CAP_DC-/3.6C — 2 — IN
DC-/6.6C — 3 — GNDI

5 +15V
7 OUT → CURRENT_MOTOR/1.4A
4 GNDO
6 -15V

Uout = -Uin * (K1 * K2 * K3)   -15V

HIC705
CRCS.P11.05

K1 HCPL-7840 K2 TL082A K3 TL082B +15V

+15V_G456/6.6C — 1 — VCC1
HV_VBUS/3.6B — 2 — IN
DC-/6.6C — 3 — GNDI

5 +15V
7 OUT → VBUS/1.4A
4 GNDO
6 -15V

Uout = -Uin * (K1 * K2 * K3)   -15V

$\overline{AGND}$

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