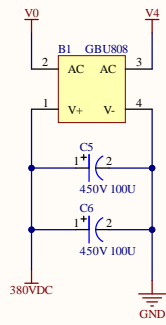
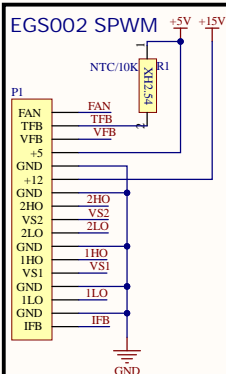


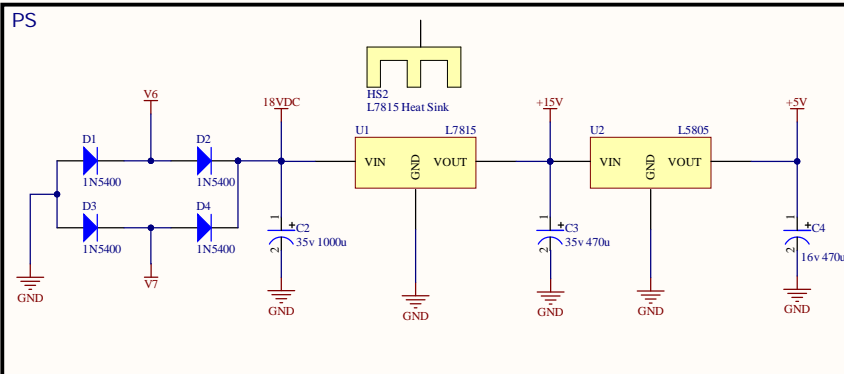
FBR



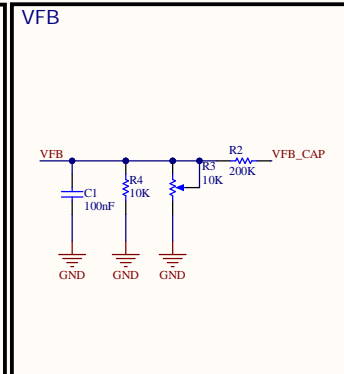
EGS002 SPWM



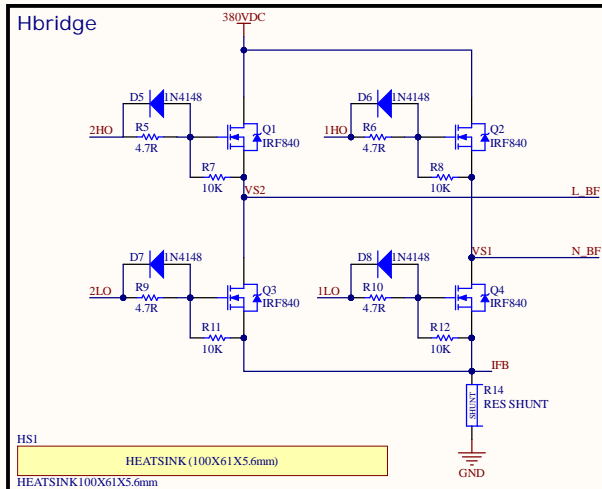
PS



VFB

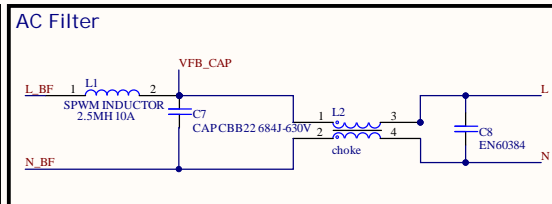


Hbridge

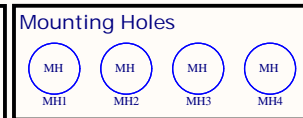


HS1
HEATSINK (100X61X5.6mm)
HEATSINK100X61X5.6mm

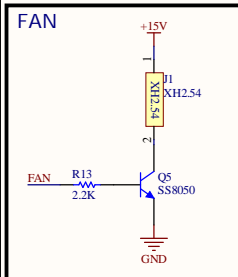
AC Filter



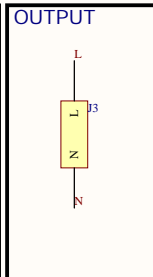
Mounting Holes



FAN

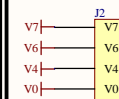


OUTPUT



INPUT

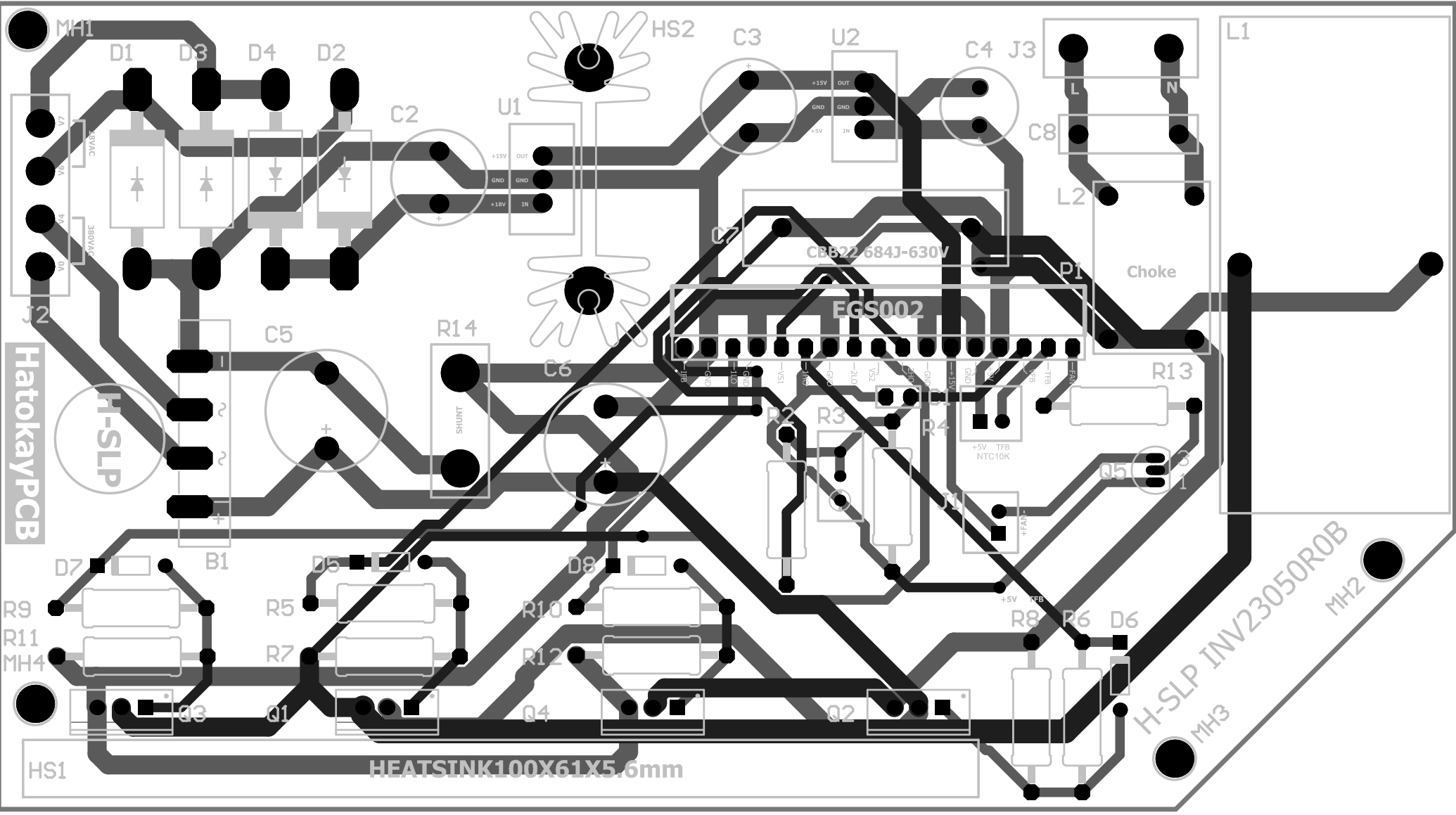
ADD: 40A fuse, switch.



signals from GZF-02-Y:
V0-V4 : 380VAC
V6-V7 : 18VAC

POWER 500W
I_{in,max} = 40A (limmited by fuse, actual is 41.6A @ Vin = 12V)
I_{out,max} = 2.17A
GND is ground after transformer & rectifier

Title		12 - 230 Inverter SPWM	
Size	Number	Revision	
A3		0.0B	
Date:	1/27/2024	Sheet of	
File:	C:\Users\...Main.SchDoc	Drawn By:	Hatokay N



Comment	Description	Designator	Footprint	LibRef	Quantity
GBU808	BRIDGE KBU 6 Amp	B1	My_KBU	BRIDGE KBU	1
100nF	None polar capacitor	C1	My_cap100n	Cap ceramic	1
35v 1000u	CAP_POL_10X5.5X0.7	C2	CAP_POL_10X5.5X0.7	CAP_POL_10X5.5X0.7	1
35v 470u	CAP_POL_10X5.5X0.7	C3	CAP_POL_10X5.5X0.7	CAP_POL_10X5.5X0.7	1
16v 470u	CAP_POL_8.2X4X0.5	C4	CAP_POL_8.2X4X0.5	CAP_POL_8.2X4X0.5	1
450V 100U	CAP_POL_18X7.9X0.8	C5, C6	CAP_POL_18X7.9X0.8	CAP_POL_18X7.9X0.8	2
CAP CBB22 684J-630V	CAP CBB22 684J-630V	C7	CAP CBB22 684J-630V	CAP CBB22 684J-630V	1
EN60384	EN60384 CAP PIN DIA = 0.6mm Inner PIN spacing = 9.45 mm PACKAGE: 16x11.3x5.85mm	C8	CAP EN60384	CAP EN60384	1
1N5400	3 Amp Diode	D1, D2, D3, D4	My_DO201-15	1N5400	4
1N4148	High Conductance Fast Diode	D5, D6, D7, D8	DO-35	Diode 1N4148	4
HEATSINK100X61X5.6 mm	HEATSINK 100X61X5.6mm	HS1	HEATSINK100X61X5.6 mm	HEATSINK100X61X5.6 mm	1
L7815 Heat Sink	Heat sink	HS2	My_Heat_sink_TO22	Heat sink	1
XH2.54	XH2.54 CON	J1	XH2.54CON	XH2.54	1
GZF-02-Y TO INV CON	GZF-02-Y TO INV CON	J2	GZF-02-Y TO INV CON	GZF-02-Y TO INV CON	1
AC L/N wire CON	connector for AC wire (D=1mm) just two holes 2mm in D.	J3	AC L/N wire CON	AC L/N wire CON	1
SPWM INDUCTOR	2.5MH 10A 51.5X17.2X23mm	L1	SPWM INDUCTOR	SPWM INDUCTOR	1
choke	22*14*8 2MH 1.0 Line Common mode Filter inductance Choke coil Annular common mode inductance 10A	L2	choke	choke	1
3mm Mounting Hole	3mm MH	MH1, MH2, MH3, MH4	3mm Mouning Hole	3mm Mounting Hole	4
Header 17	Header, 17-Pin	P1	MY_FE17	Header 17	1
IRF840	HEXFET N-Channel Power MOSFET	Q1, Q2, Q3, Q4	TO-220AB	IRF840	4
SS8050	NPN Epitaxial Silicon Transistor IC = 1.5A VCBO MAX = 40V VCEO MAX = 25V VEBO MAX = 6V	Q5	TO-92A	2N3904	1
NTC/10K	XH2.54 CON	R1	XH2.54CON	XH2.54	1
200K	Standard resistor	R2	MY_(0.5w)_0411_15	Res	1
10K	Potentiometer	R3	MY_TRIM3296W	Variable Resistor	1
10K	Standard resistor	R4, R7, R8, R11, R12	MY_(0.5w)_0411_15	Res	5
4.7R	Standard resistor	R5, R6, R9, R10	MY_(0.5w)_0411_15	Res	4
2.2K	Standard resistor	R13	MY_(0.5w)_0411_15	Res	1
RES SHUNT	RES SHUNT	R14	RES SHUNT	RES SHUNT	1
L7815	LM78XX(ST)	U1	LM78XX(ST)	L78XX(ST)	1
L5805	LM78XX(ST)	U2	LM78XX(ST)	L78XX(ST)	1