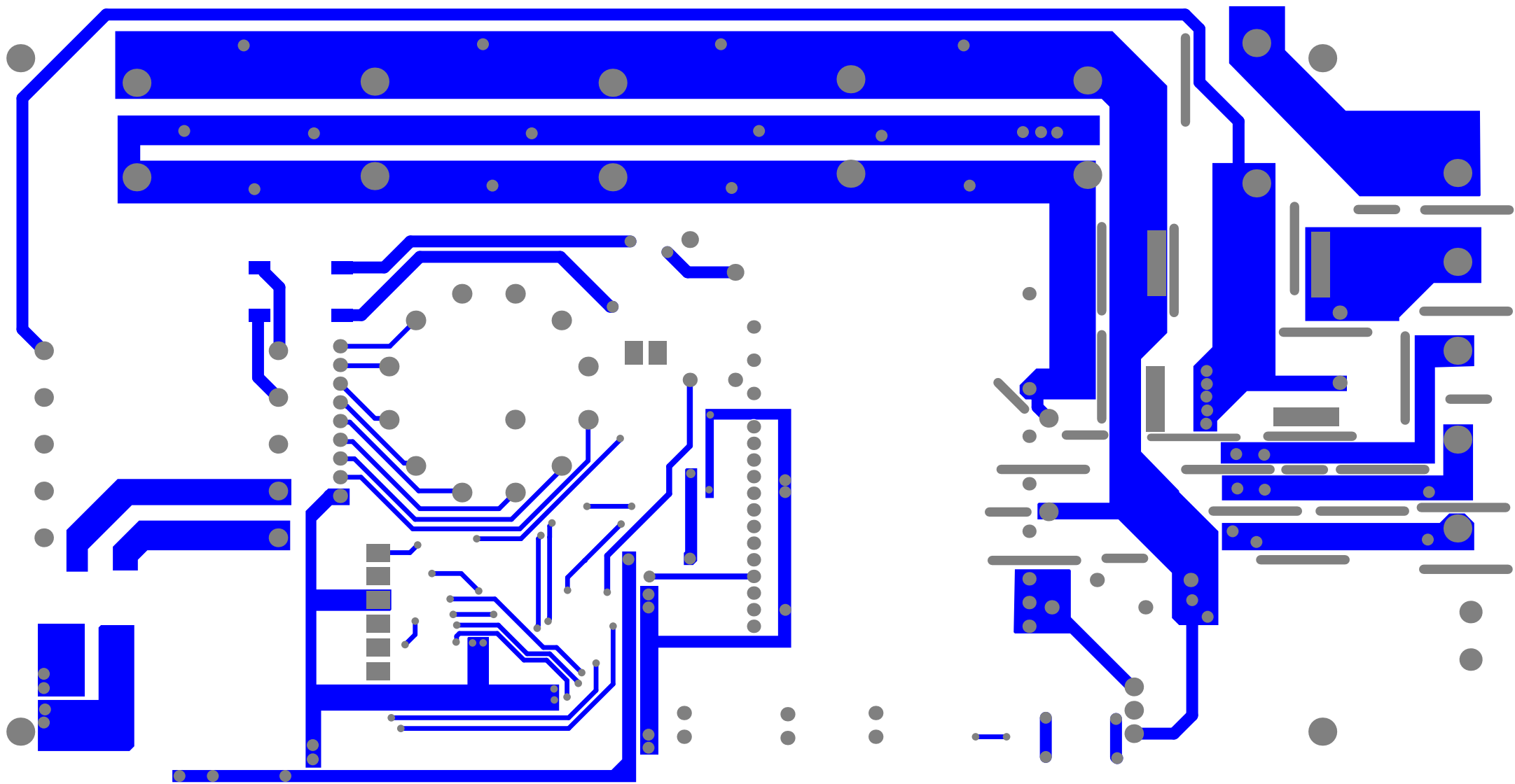
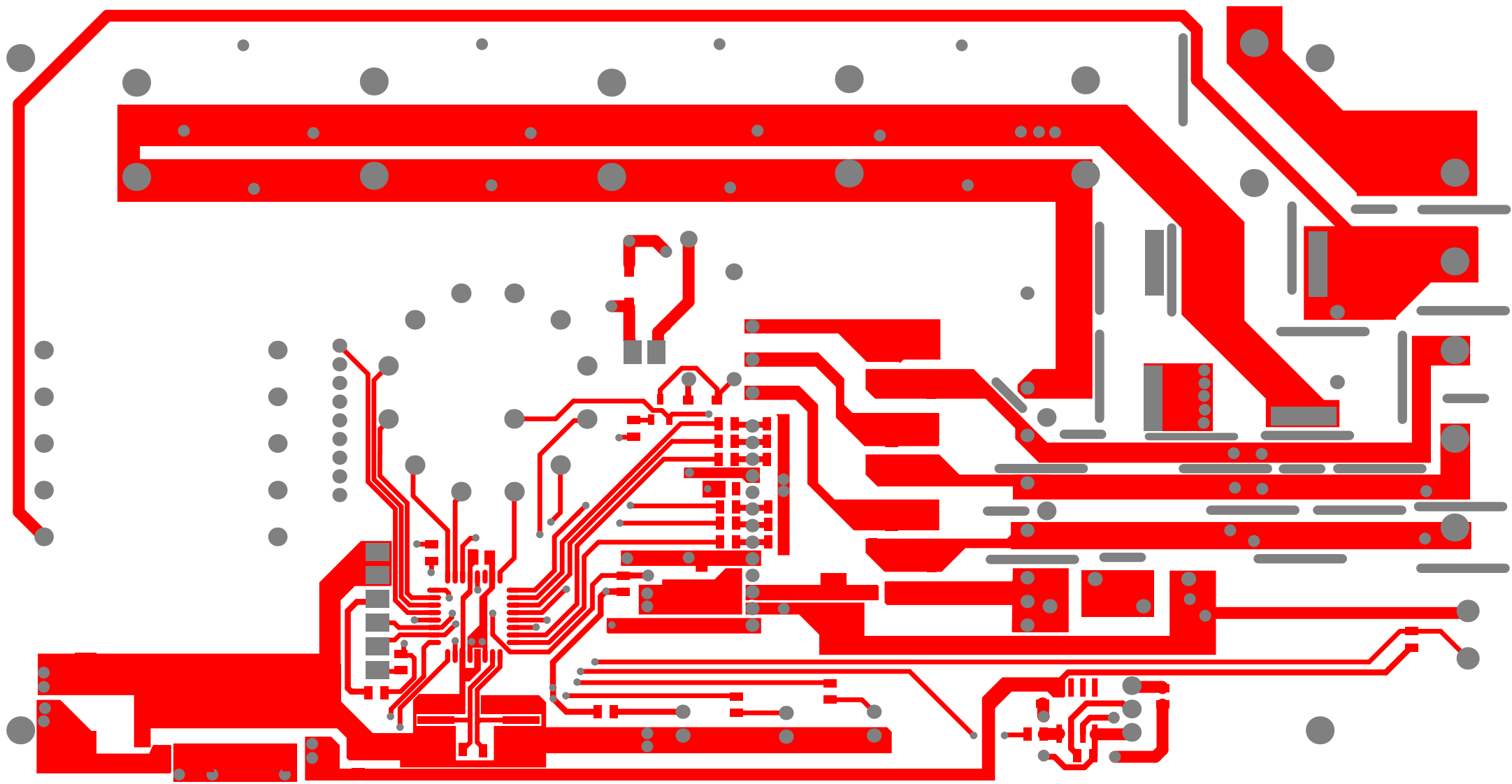
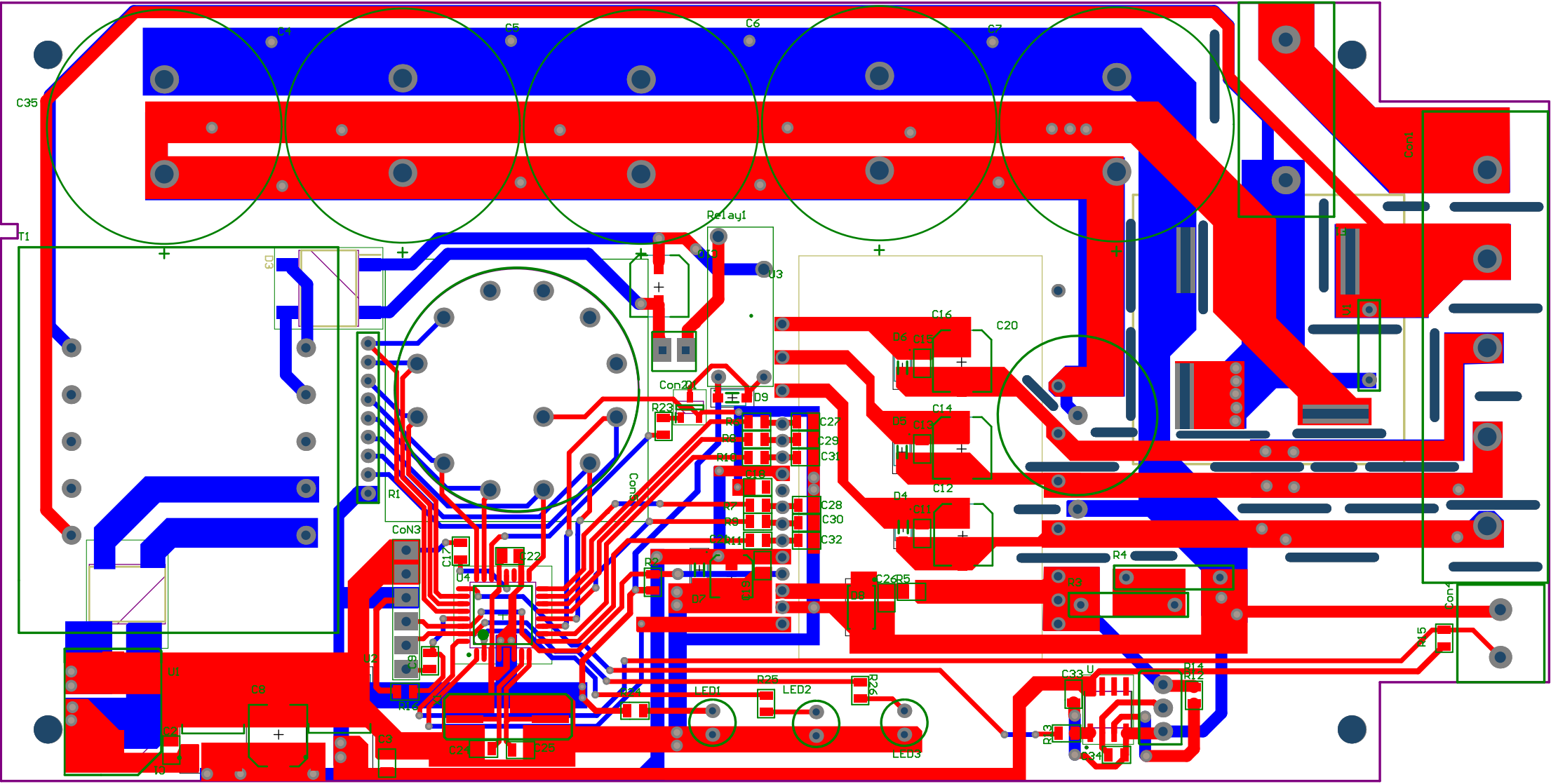


Title		
IPM_VFD		
Size	Number	Revision
A4		
Date:	2.01.2021	Sheet of
File:	C:\Users\...\IPM_VFD.SchDoc	Drawn By: HALIL TEPEDELEN







Comment	Description	Designator	Footprint	LibRef	Quantity
25v 330uf		C1	10*10 capacitor	25v 330uf	1
100nF 0805		C2, C3, C9, C17, C18, C19, C22, C27, C28, C29, C30, C31, C32, C33, C34	C-0805R	100nF 0805	15
400v 220uF		C4, C5, C6, C7, C35	400 220Uf	400v 220uF	5
50v 22uF		C8, C10, C12, C14, C16	50v 22uf	50v 22uF	5
1nF 0805		C11, C13, C15	C-0805R	1nF 0805	3
snubber		C20	snubber	snubber	1
4.7uf 50v		C21	4x5.3 cap	4.7uf 50v	1
22pF 0805		C24, C25	C-0805R	22pF 0805	2
1uF 0805		C26	C-0805R	1uF 0805	1
Connector		Con1	Connector	Connector	1
2pinConnector		Con2	2pinCon	2pinConnector	1
2pin		Con4	Contacto	2pin	1
Comutator		Con5	comutator	Comutator	1
5pinCon_		CoN3	5pinCon	5pinCon_	1
Rectifier		D1, D3	bridge	Bridge Rectifier_1	2
Rectifier		D2	Bridge Rectifier	Bridge Rectifier	1
MMSZ22V-HT		D4, D5, D6, D7, D9	SOD123	MMSZ22V-HT	5
M7_R2_00001		D8	DO-214AC	M7_R2_00001	1
fuse		F1	fuse holder	fuse	1
LTST-C150KGKT	LED	LED1, LED2, LED3	led	LTST-C150KGKT	3
BC817-40,235	Transistor BJT NPN	Q1	SOT95P230X110-3N	BC817-40,235	1
Res PACK		R1	resistor Pack	Res pack	1
10K		R2, R15, R16, R23	R-0805R	10K 0805	4
shunt	Res1206	R3, R4	shunt	shunt	2
22K		R5	R-0805R	22K 0805	1
R		R6, R7, R8, R9, R10, R11	R-0805R	R 0805	6
1M		R12	R-0805R	1M 0805	1
1K		R13, R24, R25, R26	R-0805R	1K 0805	4
R-pot	Res1206	R14	pot	R-pot	1
relay		Relay1	Relay	relay	1
Trafo		T1	trafo	Trafo	1
LM358DR	Dual standard operational amplifier 8-SOIC 0 to 70	U	SOIC127P599X175-8N	LM358DR	1
L78M15CDT		U1	TO-252	L78M15CDT	1
L78M05CDT		U2	TO-252	L78M05	1
IGBT		U3	6MBP20XSF06050P	6mbp20xsf060-50	1
ATMEGA328P-AU	Microchip Technology ATMEGA328P-AN, 8bit AVR Microcontroller, 20MHz, 32 kB Flash, 32-Pin TQFP	U4	TQFP80P900X900X12032N	ATMEGA328P-AU	1
Varistor		V1	varistor	Varistor	1
Crystal	AS49SD-16M-FC160F3-TR	X1	crystal	Crystal	1