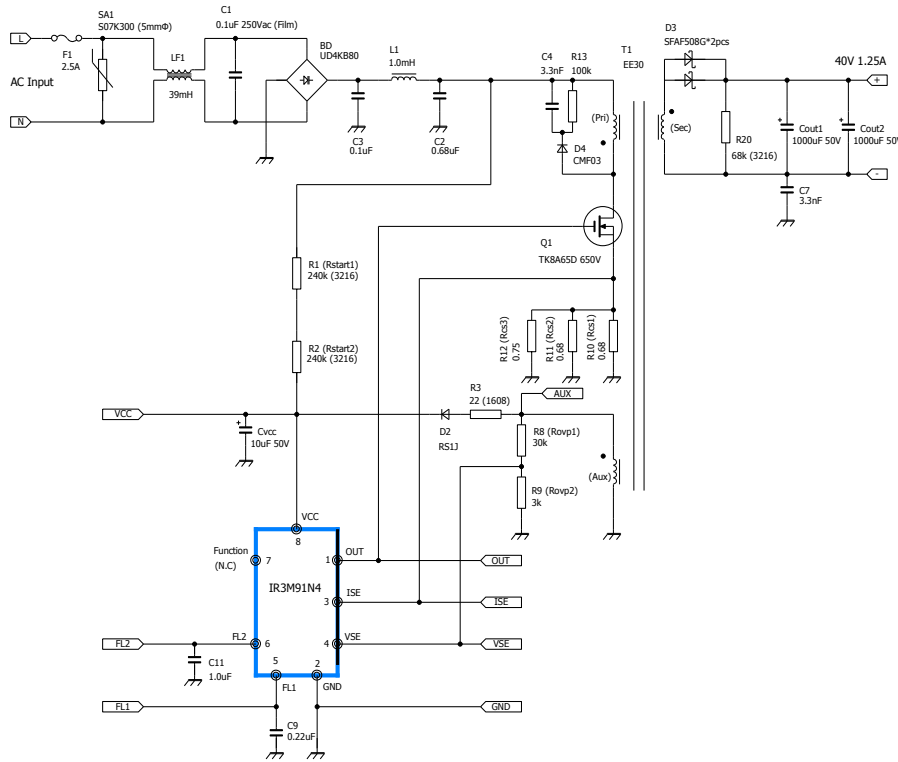


IR3M92N4 Reference Design & BOM (50W)

Application circuit



BOM

○ Vin=85V~265VAC / Pout = 50W (40V/1.25A) BOM

2014/3/19

Ref. No.	Description	Model number	Manufacturer	Qty	Remarks
T1	Trans coil	EE30	Tokyo Parts	1	No: 30T (L=0.15mH), Ns: 13T, Na: 6T
L1	Choking coil 1.0mH	RCP1317NP-102L	Sumida	1	※Check mains terminal interface voltage
L2	open	Open		0	
L3	open	Open		0	
F1	Fuse AC250V 2.5A	AC250V 2.5A	Littelfuse	1	8.5 * 4mm, pitch5.08mm, φ d=0.6
SA1	Varistor 300V 7mmφ	S07K300	EPCOS	1	
LF1	Line Filter 39mH	0R8A393TLN	Tokyo Parts	1	
BD1	Diode bridge rectifier	UD4KB80	Shindengen	1	
C1	X-capacitor (0.1uF 250Vac)	250MMBA104	Rubycon	1	
C2	Film capacitor (0.68uF 450Vdc)	630MPK684	Rubycon	1	
C3	Film capacitor (0.1uF 450Vdc)	630MPK104	Rubycon	1	
C4	3.3nF	RDRE72J332	Murata	1	
C5	open	Open		0	
C6	open (3217)	Open		0	
C7	Y capacitor 3.3nF	DE1E3KX332M	Murata	1	
C9	Capacitor 0.22uF (1608)	0.22uF (1608)		1	
C11	Capacitor 1.0uF (2125)	1.0uF (2125)		1	
C12	open (1608)	Open		0	
C13	open (3216)	Open		0	
C14	open (1608)	Open		0	
C15	open (3216)	Open		0	
GVCC	Electrolytic Capacitor 10uF 50V	YXF, 10uF, 50V	Rubycon	1	
GOUT1	Electrolytic Capacitor 1000uF 50V	YXF, 1000uF, 50V	Rubycon	1	
GOUT2	Electrolytic Capacitor 1000uF 50V	YXF, 1000uF, 50V	Rubycon	1	
D2	Switching diode	RS1J	Taiwan semiconductor	1	
D3	Fast recovery diode	SFAF508G	Taiwan semiconductor	2	
D4	Fast recovery diode	CMF03	Toshiba	1	
R1 (RSTART-1)	Resistor 240k (3216)	240k (3216)		1	RSTART = (RSTART-1+RSTART-2)
R2 (RSTART-2)	Resistor 240k (3216)	240k (3216)		1	RSTART = (RSTART-1+RSTART-2)
R3	Resistor 22 (1608)	22 (1608)		1	
R4	open (3216)	Open		0	
R5	open (3216)	Open		0	
R6	open (3216)	Open		0	
R8 (ROVP1)	Resistor 30k(1608)	30k (1608)		1	
R9 (ROVP2)	Resistor 3k(1608)	3k. (1608)		1	
R10 (RCS1)	Resistor 0.68 (3216)	0.68 (3216)		1	
R11 (RCS2)	Resistor 0.68 (3216)	0.68 (3216)		1	
R12 (RCS3)	Resistor 0.75 (3216)	0.75 (3217)		1	
R13	Resistor 100k 1W (Axial)	MO (100k 1W)	KOA	1	
R19	open (3216)	Open		0	
R20	Resistor 68k (3216)	68k (3216)		1	
R21	open (3216)	Open		0	
R22	open (3216)	Open		0	
R23	open (3216)	Open		0	
R24	open (3216)	Open		0	
R25	open (3216)	Open		0	
R26	open (3216)	Open		0	
R27	open (3216)	Open		0	
R28	open (1608)	Open		0	
R29	open (1608)	Open		0	
Q1	FET	TK8A65DF	Toshiba	1	
IC1	SOP-8	IR3M92N4	SHARP	1	
PCB	1.2mm thickness double-side board	FR-4UL94V-0		1	
Total				32	

Values written in this sheet are only for your reference.

Please evaluate enough with your products and equipments.