

Product Overview:

RM3257AD is a high-precision CC/CV PSR AC/DC converter controller.

RM3257AD can achieve less than 75mW system standby power consumption to meet the six energy efficiency requirements within the full voltage range.

RM3257AD integrates 800V power BJT, suitable for high performance and external original compact charger. Because the chip works in the primary detection and control mode, so it does not need opto-coupler and TL431.

RM3257AD uses quasi-resonant (QR) drive technology to improve the power tube voltage, EMI and system conversion efficiency.

RM3257AD is offered in SOP-7 package.

System Specifications: 5V/2A

Input Voltage	85Vac-265Vac	Output Power	10W
Power Tube	800V/2A	Efficiency	≥ 75.8%
CV tol.	≤ ±3%	Standby Power Consumption	< 75mW
CC tol.	≤ ±3%	Transformer	EE19

Typical Application:

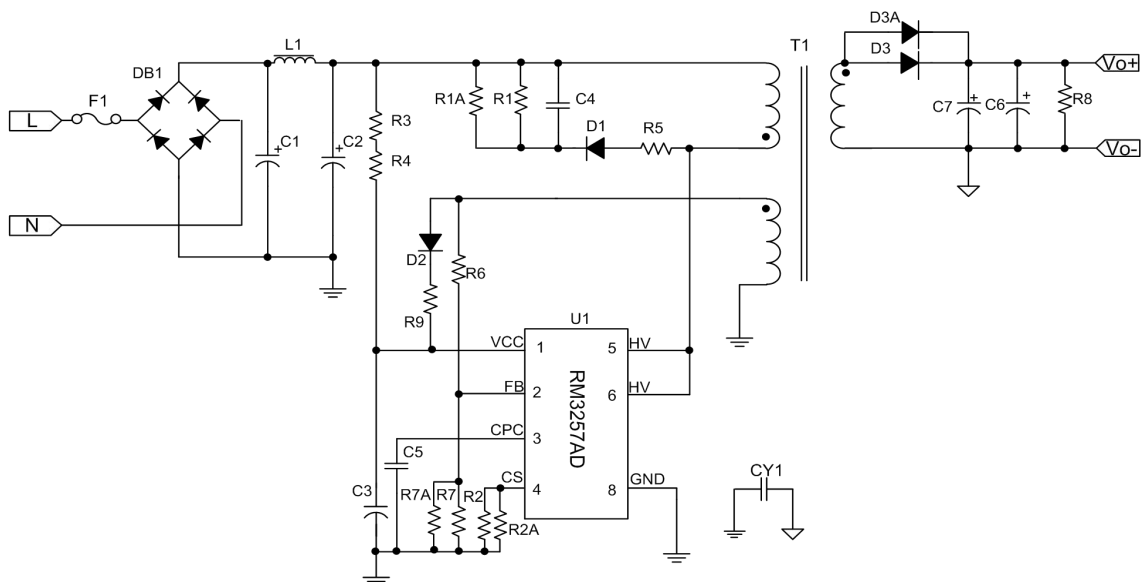
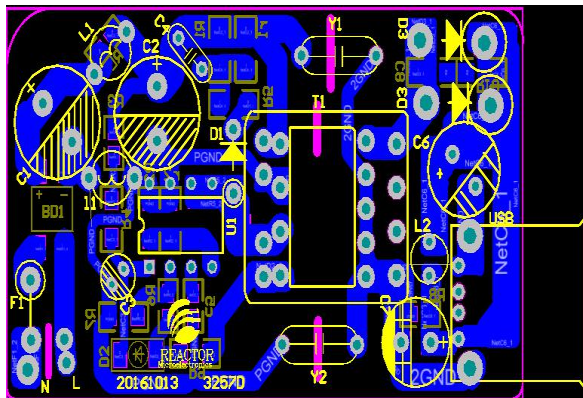


Figure 1. system application schematic

BOM of the system:

No	Component	Specification Models	Amount	Location number	Packaging Requirements
1	Fuse	250V,1A	1	F1	DIP
2	SMD Resistor	220KΩ, 0.125W,±5%,	2	R1 R1A	SMD0805
3	SMD Resistor	1.5Ω, 0.25W,±5%,	2	R2 R2A	SMD1206
4	SMD Resistor	1.5MΩ, 0.125W,±5%,	1	R3	SMD0805
5	SMD Resistor	2.2MΩ, 0.125W,±5%,	1	R4	SMD0805
6	SMD Resistor	100Ω, 0.25W,±5%,	1	R5	SMD1206
7	SMD Resistor	68KΩ, 0.125W,±5%	1	R6	SMD0805
8	SMD Resistor	56KΩ, 0.125W,±1%	1	R7	SMD0805
9	SMD Resistor	180KΩ, 0.125W,±1%	1	R7A	SMD0805
10	SMD Resistor	1KΩ, 0.125W,±5%	1	R8	SMD0805
11	SMD Resistor	1.2Ω, 0.125W,±5%	1	R9	SMD0805
12	Electrolytic Capacitor	10μF,400V,±10%	1	C1	DIPΦ5mm*11mm
13	Electrolytic Capacitor	15μF,400V,±10%,	1	C2	DIPΦ10mm*17mm
14	Electrolytic Capacitor	10μF,25V,±10%,	1	C3	DIPΦ4mm*8mm
15	Dacron Capacitor	2.2nF,1KV,±10%	1	C4	DIP
16	Chip Capacitor	100nf,25V,±10%	1	C5	SMD0805
17	Electrolytic Capacitor	1000μF,10V,±10%,	2	C6 C7	DIPΦ13mm*8mm
18	Y Capacitor	2.2nF,1KV,±20%	1	CY1	DIP
19	Rectifier Bridge	MB6F,1A,600V	1	DB1	SOP-4
20	Diode	FR107,1A,1KV	1	D1	DO-41
21	SMD Diode	RS1M,1A,1000V	1	D2	DO-214AC
22	Schottky Diode	SR540,5A,40V	2	D3,D3A	DO-201AD
23	DM Inductance	2mH,±10%	1	L1	DIPΦ6mm*8mm
24	IC	RM3257AD	1	U1	DIP-8
25	Transformer	EE19, 5*5PIN	1	T1	DIP
26	PCB	62mm*35mm		PCB	

PCB:



DEMO:

