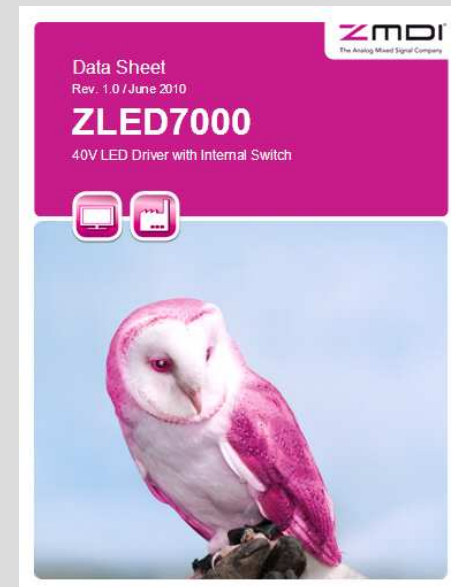


ZLED7000KIT-D1

Kit Description v. 0.9

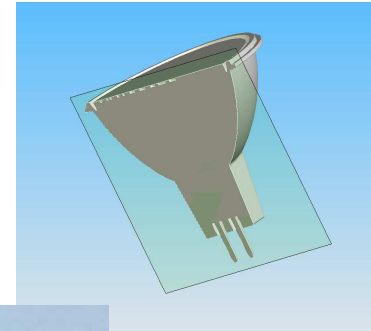


Content

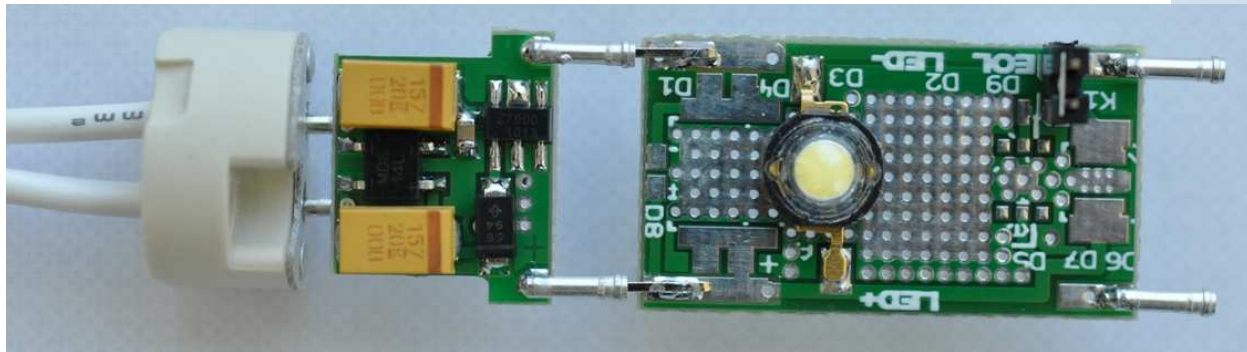
1. Features
2. Quick Start
3. Schematics & Assembly Map
4. PCB Layout
5. BOM
6. Ordering Information

1. Features

- Kit demonstrates ZLED7000 functionality in a GU5.3 halogen lamp replacement application
- Minimum board area
- AC connector fits GU5.3 socket
- 12VAC or 12VDC operation of up to 3 white LEDs
- 300 mA LED current



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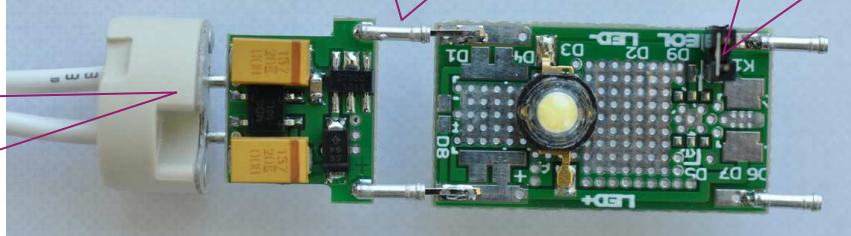
ZLED7000KIT-D1

2. Quick Start

Connect 12VAC or 12VDC (via rectifier bridge). Kit will run down to the VIN lower limit.

connect LED string

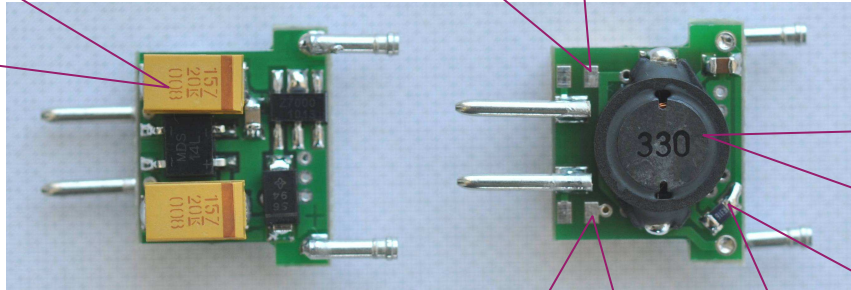
place jumper on last LED-PCB must be set



The driver circuit is intrinsically safe against open LED circuit.

Voltage rating of the bulk caps C1/C2 is limiting max. supply voltage. Replace with 50V caps to supply the kit up to the upper VIN limit.

connect DC+ to bypass rectifier

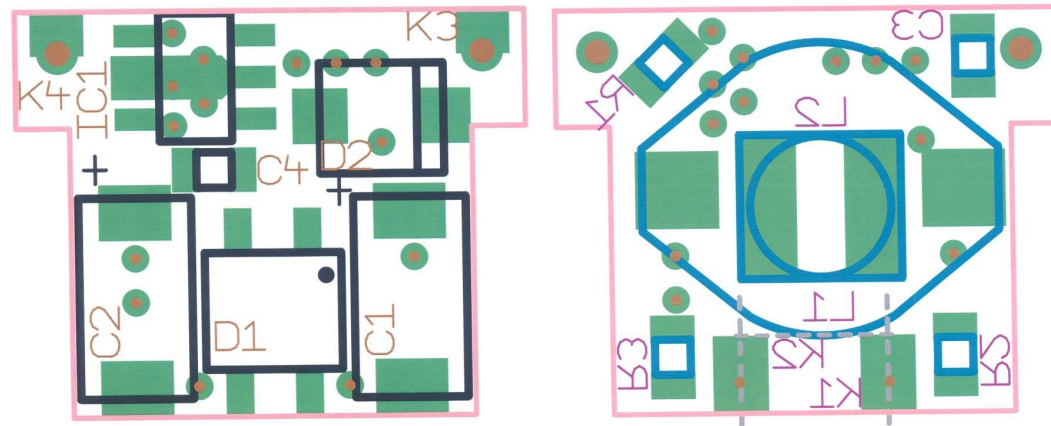
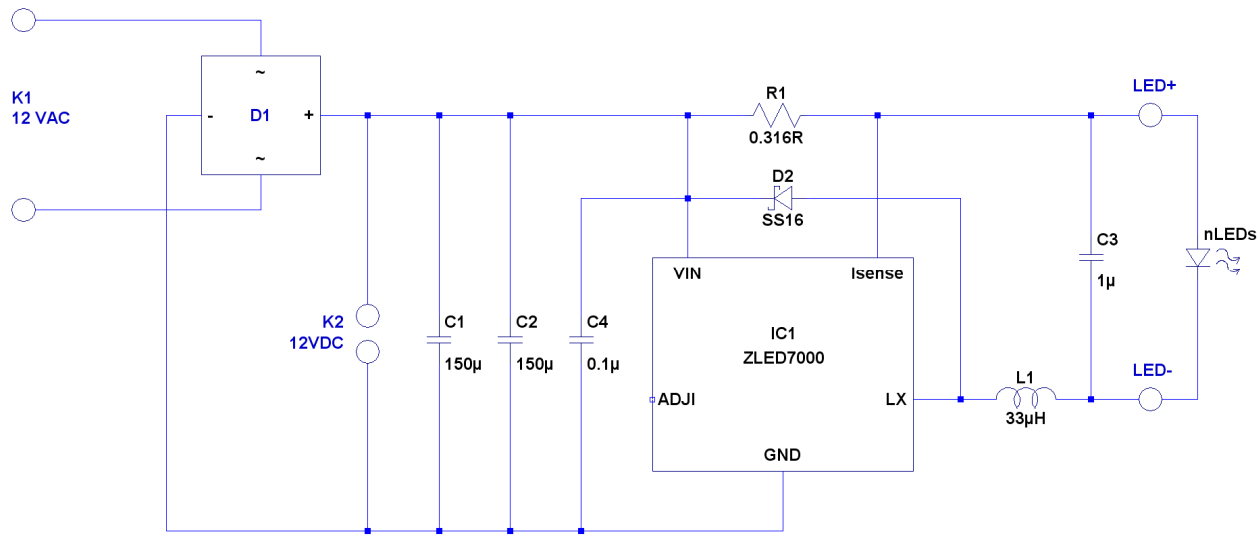


Footprint option allows to test alternative coils, e.g. unshielded option to compare EMI properties (ref. BOM).

change R1 for different LED current

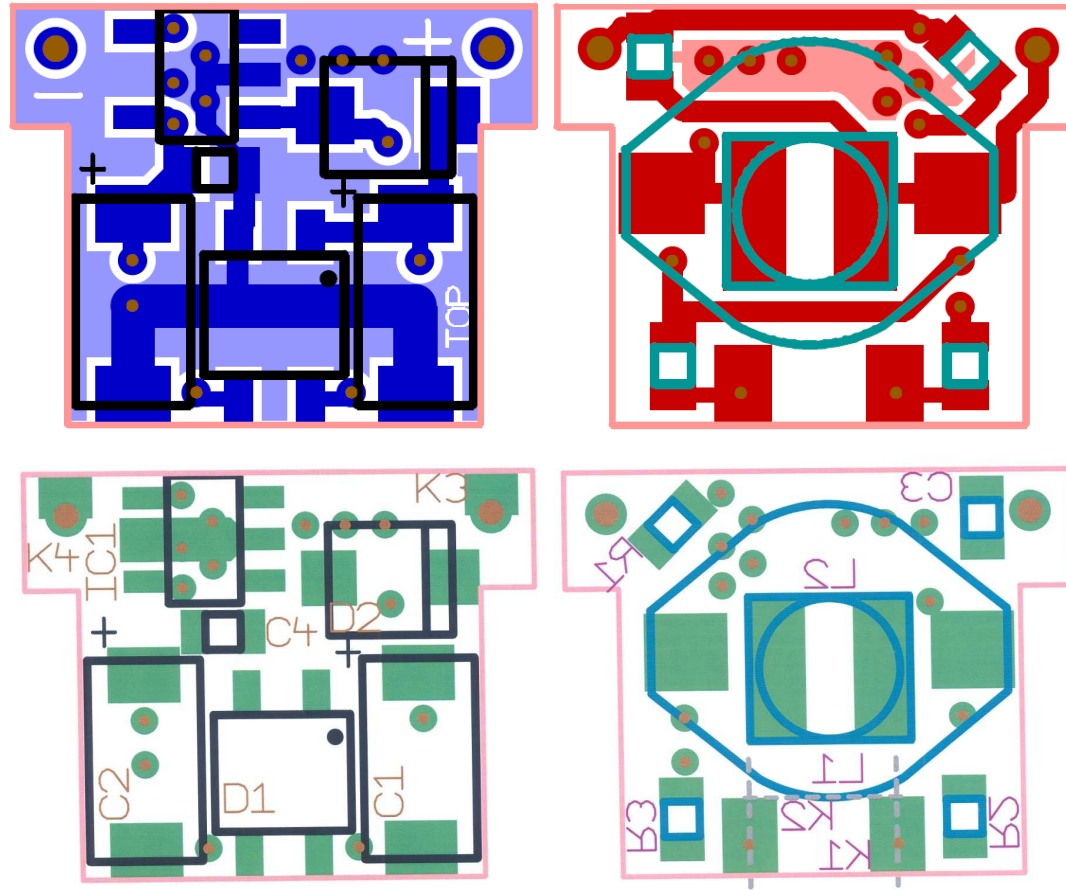
connect DC+ to bypass rectifier

3. Schematics & Assembly Map



ZLED7000KIT-D1

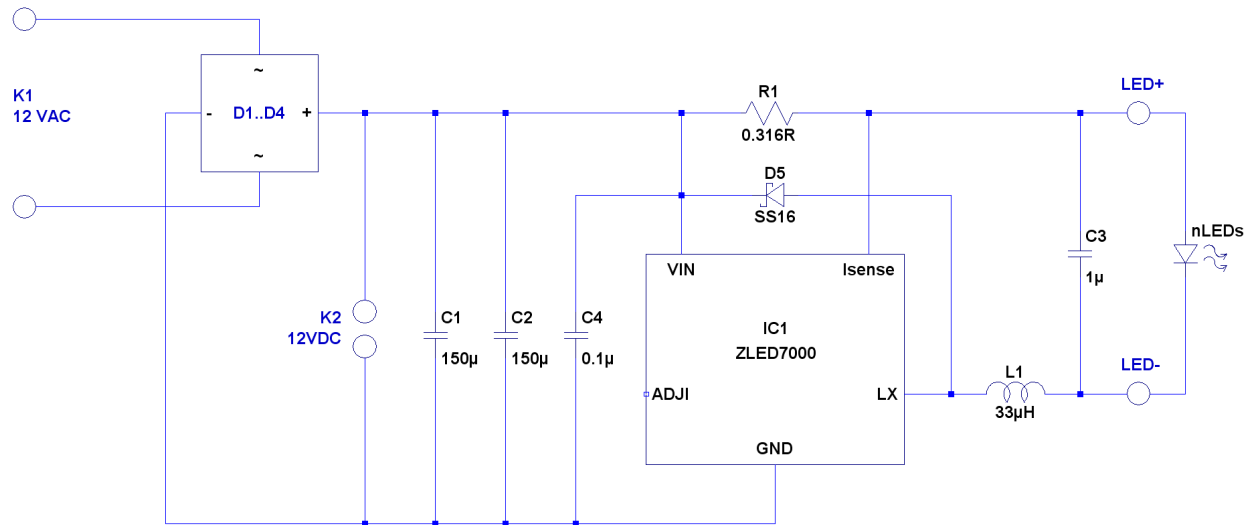
4. PCB Layout



PCB area 18.2mm x 14.6mm

ZLED7000KIT-D1

5. BOM



No.	Quantity	Symbol	Description	Parameters	Part No.	Manufacturer	Package
1	1	IC1	LED driver		ZLED7000	ZMDI	SOT89-5
2	1	D1	Schottky Rectifier Bridge	40V / 1A	CDBHD140L	Comchip	TO-269AA
3	1	D2	Schottky Diode	60V / 1A	SS16	various	DO214
4	1	R1	Resistor	0.316Ω / 1%		various	0805
5	1	L1	Power Inductor, shielded	33µH	WE-PD3 74453133	Würth	
6	(1)	(L1)	Power Inductor, unshielded	33µH	WE-PD2 744774133	Würth	
7	2	C1, C2	Tantalum Cap	150µF/20V	T491 Series	Kemet	Type D
8	1	C3	X7R Cap	1µF/25V		various	0805
9	1	C4	X7R Cap	100nF/50V		various	0805
10	2	K1	Conatct Pin	Ø1.5 / 10			

ZLED7000KIT-D1

6. Ordering Information

ZLED7000KIT-D1

ZLED7000 MR16 Halogen replacement Demo Kit 12VAC/VDC, incl. 1 ZLED-PCB1

ZLED7001KIT-E1

ZLED7001 Evaluation Board up to 24VAC / 40VDC, incl. 1 ZLED-PCB1

ZLED7010KIT-D1

ZLED7010 Demo Board with LED on cool body 12VAC/VDC

ZLED-PCB1

Test PCB with one 3W white HB-LED, cascadable to one multiple LED string

ZLED-PCB2

10 unpopulated test PCBs for modular LED string with footprints of 9 common HB-LED types

Sales and Further Information			
	www.zmdi.com	sales@zmdi.com	
Zentrum Mikroelektronik Dresden AG Grenzstrasse 28 01109 Dresden Germany	ZMD America, Inc. 8413 Excelsior Drive Suite 200 Madison, WI 53717 USA	ZMD AG, Japan Office 2nd Floor, Shinbashi Tokyu Bldg. 4-21-3, Shinbashi, Minato-ku Tokyo, 105-0004 Japan	ZMD Far East, Ltd. 3F, No. 51, Sec. 2, Keelung Road 11052 Taipei Taiwan
Phone +49 (0)351.8822.7.772 Fax +49(0)351.8822.87.772	Phone +01 (608) 829-1987 Fax +01 (631) 549-2882	Phone +81.3.6895.7410 Fax +81.3.6895.7301	Phone +886.2.2377.8189 Fax +886.2.2377.8199

Ordering Information