DW8522 MR16 EVB Manual

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R&D Division

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" First Technology & Best Quality "
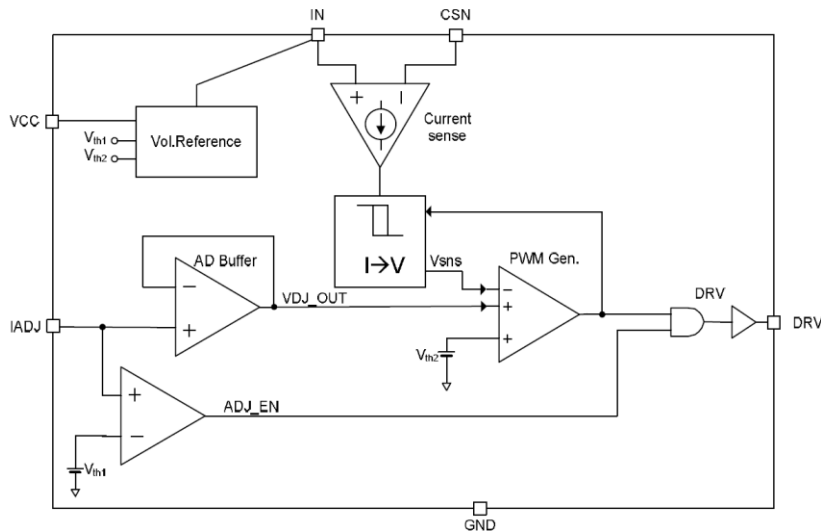
Features

- **Topology**   **: Hysteric buck controller**
- **Input voltage**   **: 4.5 ~ 40V**
- **Dimming Frequency**   **: PWM (1:1000) and Analog dimming**
- **Switching frequency**   **: Up to 2MHz**
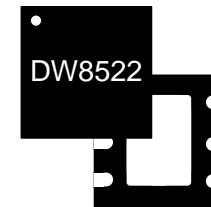- **Protection function**   **: Soft-Start, Thermal protect**

Applications

- **MR16 Lighting**
- **Offline LED lamps and fixtures**
- **Signage and Decorative lighting**
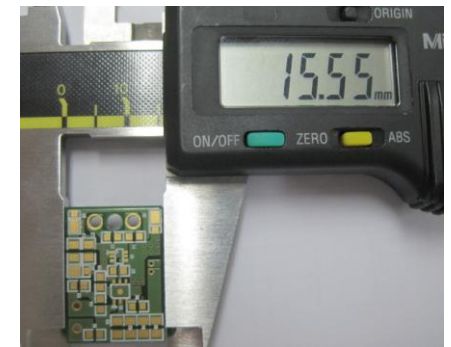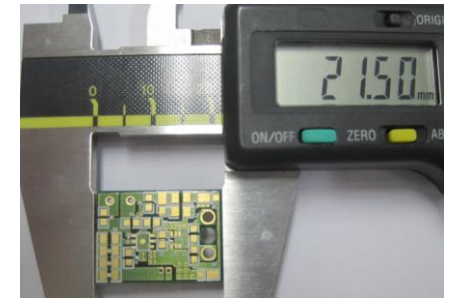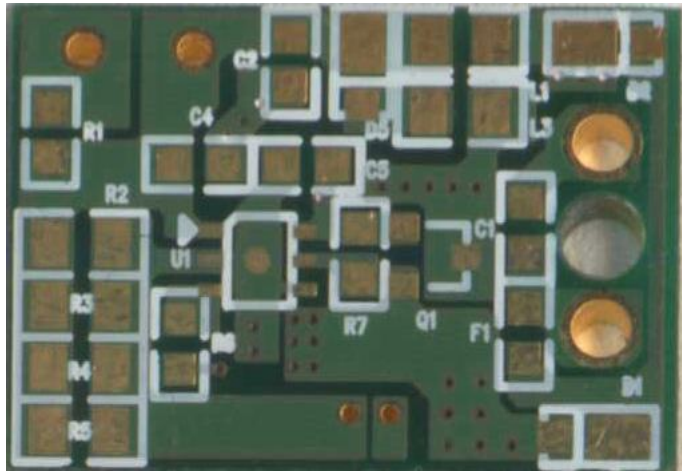- **General purpose LED lighting**

Block Diagram

Package

8 TDFN
(3 × 3 × 0.75)

Promotion Board

PCB Size : 21.5mm x 15.55mm

Pin Description

Pin	Name	Description
1	IN	Supply voltage Input. (4V to 40V). Decouple to GND with 1uF or higher value capacitor
2	CSN	Current sense input. Connect a resistor between IN and Sense.
3	IADJ	PWM/Analog dimming input. If not use dimming function, connect with VDD.
4	GND	Ground
5	OUT	Gate drive output.
6	VDD	Regulator output. Decouple to GND with 1uF.

3

DW8522 : High speed performance Power LED Driver

*L*eading company
*E*merging company
*D*ifferential company

Promotion Board circuit
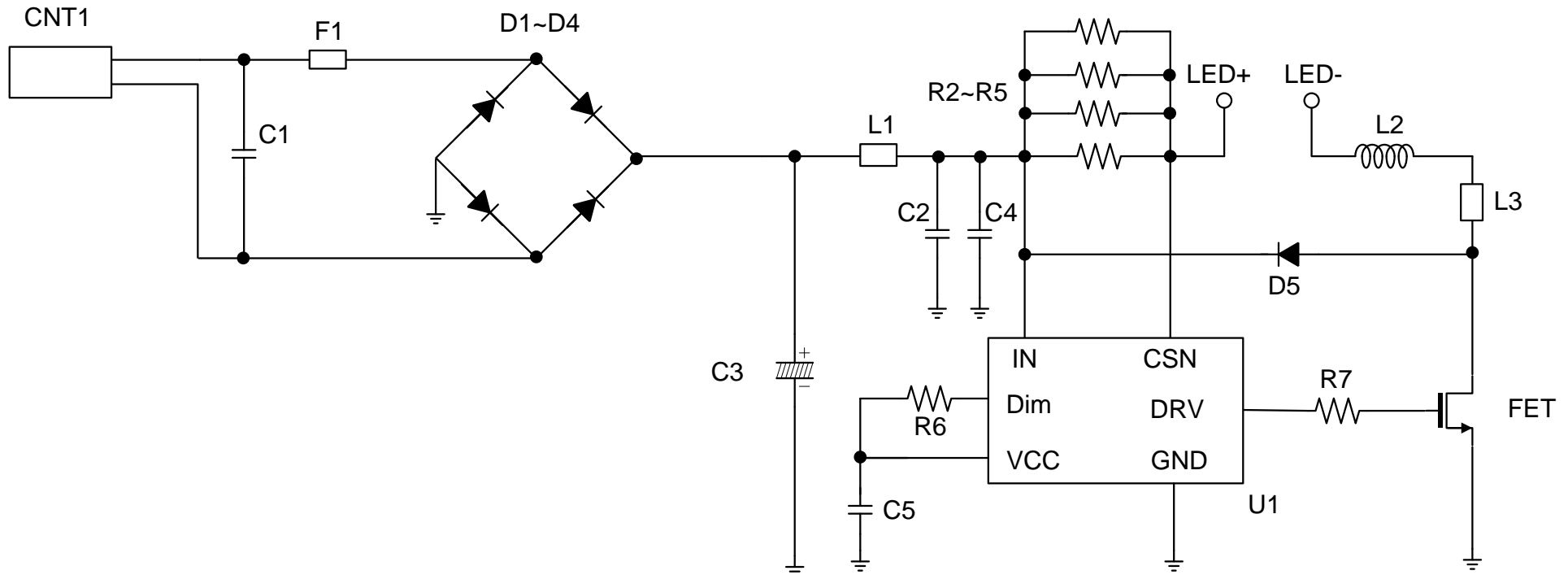
Current setting method : 0.2/R   R=(R2//R3//R4//R5)

R: 1ohm → 200mA, R:0.5ohm → 400mA,R: 0.25ohm → 800mA

Real circuit

LED current : 600mA

CNT1　　F1　　MSS2P3

C1

0.68ohm　LED+　LED-

47uH

1uF

330uF

MSS2P3

Vin : AC 12V

LED string : 2 series, 3 parallel

Output Power : 3~4W

IN	CSN
Dim	DRV
VCC	GND

0ohm

FDG315N

1uF

DW8522