QUICK START PROCEDURE

Demonstration circuit 633 is easily setup to evaluate the high efficiency of the LTC3202, low noise white LED driver circuit. Refer to Figure 1 for proper equipment setup and follow the procedure outlined below.

NOTE: When measuring the input or output voltage ripple, care must be taken to avoid a long lead on the oscilloscope probe. Measure the input or output voltage ripple by touching the probe tip directly across the Vin or Vout and Gnd terminals, as shown in Figure 2.

1. Before turning "ON" the power supply, connect a 3.3V, 500mA bench supply to the Vin and Gnd terminals.
2. Set jumpers JP1 and JP2 to the "1" position.
3. Turn "ON" the input supply and observe that the white LED's light up. The VFB voltage should measure approximately 0.6V.
4. For 2/3 brightness connect JP1 to the "0" position and leave JP2 in the "1" position. For 1/3 brightness connect JP2 to the "0" position and leave JP1 in the "1" position.

Design files for this circuit board are available. Call the LTC factory.

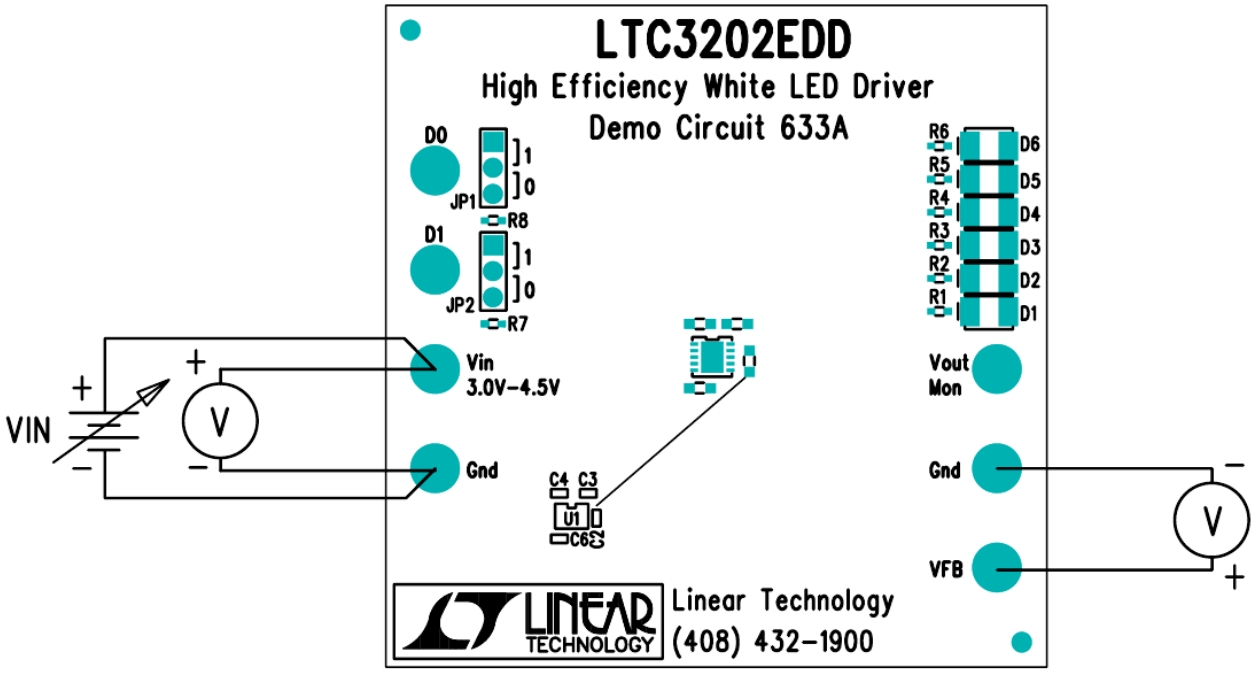


Figure 1. Proper Measurement Equipment Setup

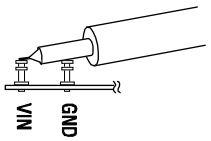
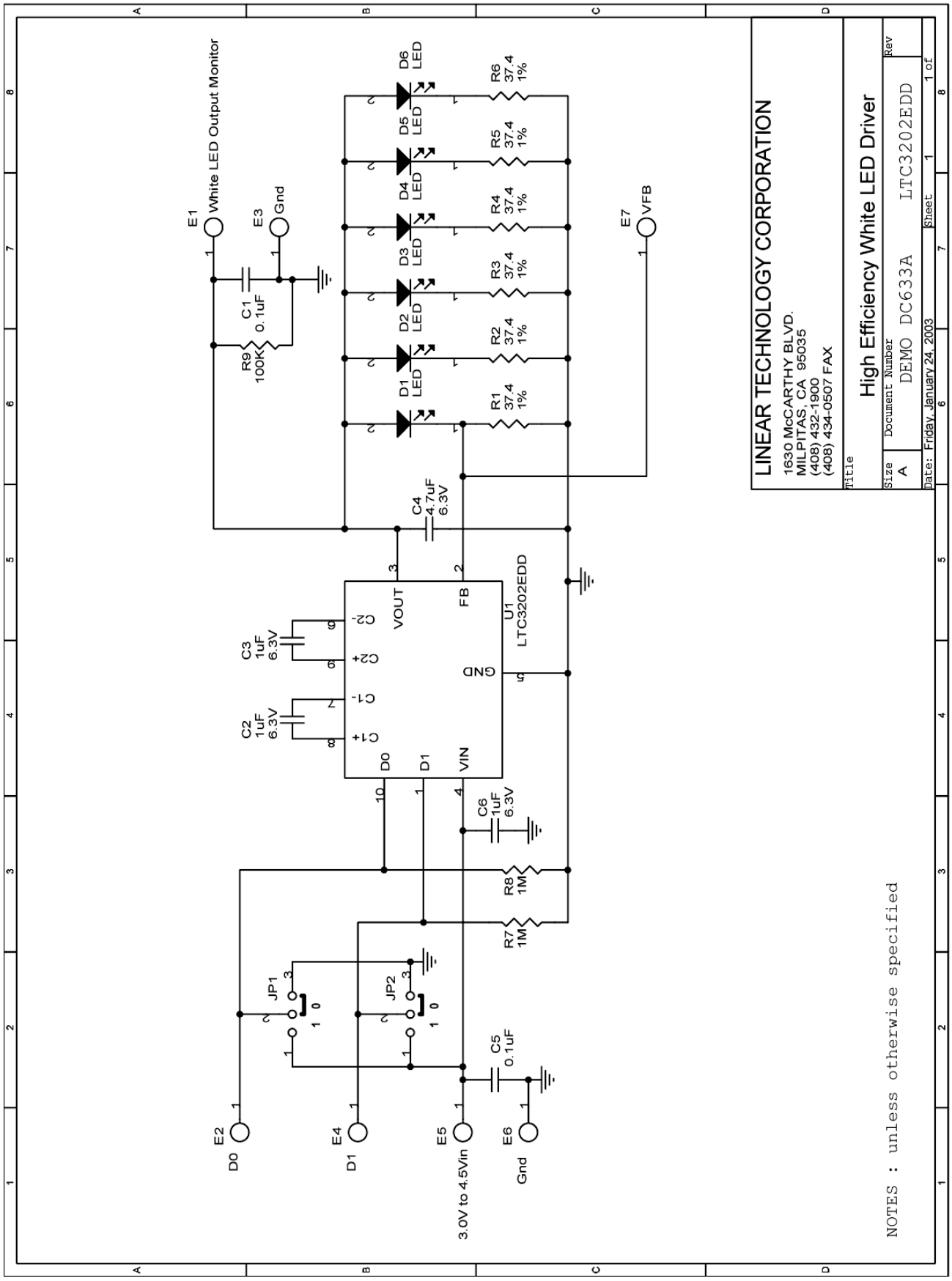


Figure 2. Measuring Input or Output Ripple


LINEAR TECHNOLOGY CORPORATION
1630 McCARTHY BLVD.
MILPITAS, CA 95035
(408) 432-1900
(408) 434-0507 FAX
Title
High Efficiency White LED Driver
Size
A
Document Number
DEMO DC633A
LTC3202EDD
Rev
Date: Friday, January 24, 2003
Sheet 1 of 1
NOTES : unless otherwise specified
U1
LTC3202EDD
VOUT
FB
GND
VIN
D0
D1
C1+
C1-
C2+
C2-
C1
0.1uF
C2
1uF
6.3V
C3
1uF
6.3V
C4
4.7uF
6.3V
C5
0.1uF
C6
1uF
6.3V
R1
37.4
1%
R2
37.4
1%
R3
37.4
1%
R4
37.4
1%
R5
37.4
1%
R6
37.4
1%
R7
1M
R8
1M
R9
100K
D1 LED
D2 LED
D3 LED
D4 LED
D5 LED
D6 LED
JP1
JP2
E1
White LED Output Monitor
E2
D0
E3
Gnd
E4
D1
E5
3.0V to 4.5Vin
E6
Gnd
E7
VFB