

**Introduction:**

The D340 Designer's Kit is intended to aid you in developing an EL lamp driver configuration using the Durel D340 IC chip that meets your power draw budget while achieving your brightness requirements from the EL lamp. A list of components contained in the kit is in Table 1.

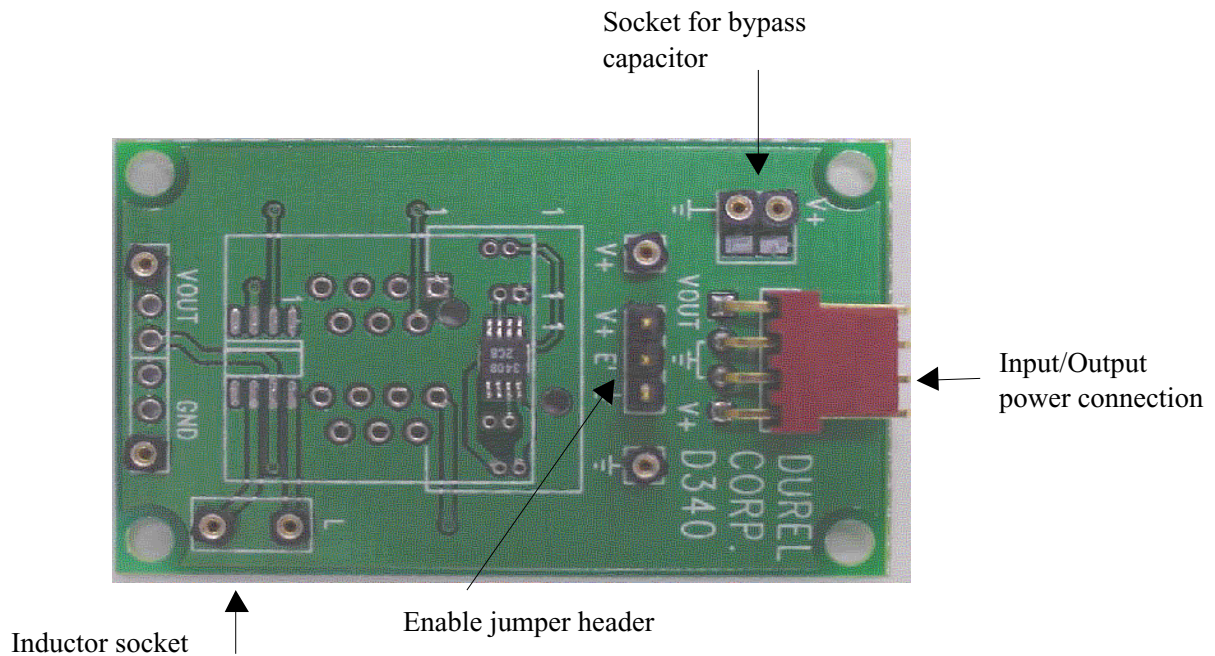
<b>Table 1: List of Components</b>	
<b>Description</b>	<b>Qty</b>
D340B Unit Samples	5
D340 Designer's Kit Board	1
D340 Mini-Module Board	1
Assorted SMT Inductors	>2
SMT Adapter Boards	2
Bypass Capacitor: 4.7 $\mu$ F	1
Kit Board Power Connector	1

**The D340 Designer's Kit Board:**

The Designer's Kit Board (see Figure 1), which comes with a D340B IC already soldered to the board, is a useful tool for optimizing a D340B driver circuit for any application. Refer to the sample circuits in the D340B datasheet for a starting point of your design. Simply insert an appropriate value of inductor (L) into the labeled sockets, as shown in Figure 1. Additional sockets are provided in the Kit Board for a bypass capacitor between V+ and ground (GND) to absorb electrical noise in the DC input.

On the Designer's Kit Board a jumper header is normally attached to connect E' to GND. This jumper header can be removed to control the enable pin (E') with an externally supplied signal. Make sure that an appropriate load is connected between the output (Vout) and GND before applying power to the chip through the Kit Board power connections. A sample Durel EL lamp is provided in the Designer's Kit. This lamp may be cut to your required lit area.

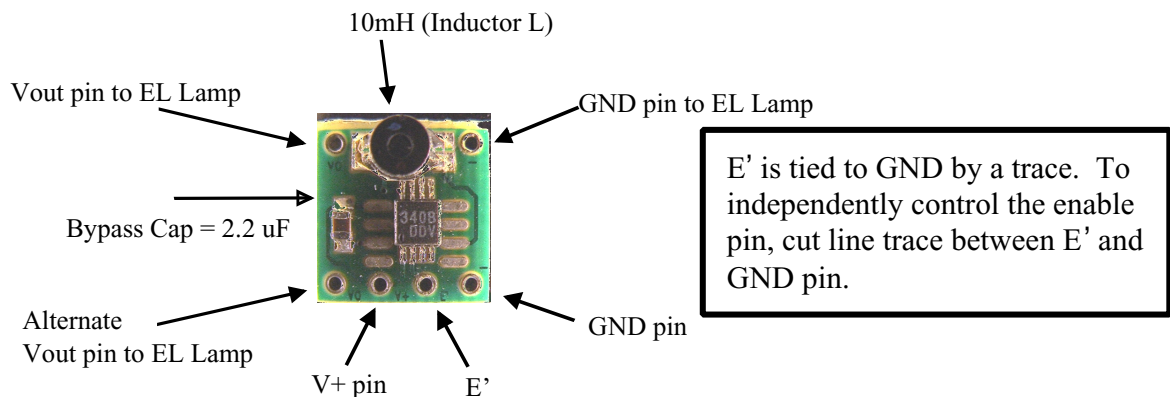
The user can replace different values of external components on the Designer's Kit Board in order to achieve design goals. A selection of standard values of inductors are included in the D340 Designer's Kit for your use.



**Figure 1: The D340 Designer's Kit Board**

**The D340 Mini-Module Board:**

The D340 Mini-Module Board (see Figure 2) is an example of a finished circuit based on the D340 chip. It is meant as a representation of the board area requirement for the EL lamp driver circuit in the application. All the external components have been selected and pre-soldered onto the module board with the D340B IC.



**Figure 2: The D340 Mini-Module Board**

**ISO 9001 Certified**

**DUREL Corporation, 2225 W. Chandler Blvd., Chandler, AZ 85224-6155**

Tel: (480) 917-6000

FAX: (480) 917-6049

Website: <http://www.durel.com>

*The DUREL name, logo and PROTOLIGHT are registered trademarks of DUREL CORPORATION.*

*The D340 driver is covered by U.S. Patent Nos. #5,313,141. Corresponding foreign patents are issued and pending. This information is not intended to and does not create any warranties, expressed or implied, including any warranty of merchantability or fitness for a particular purpose. The relative merits of materials for a specific application should be determined by your evaluation.*