

Fig. 3: Actual-size PCB pattern of the webcam view illuminator

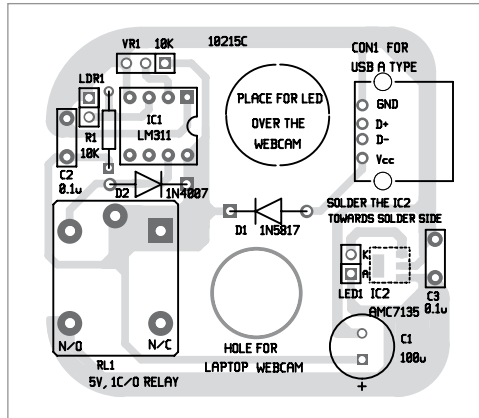


Fig. 4: Component layout of the PCB

After construction, fix the PCB on the laptop in such a way that hole shown in the PCB does not interrupt the IR rays. LED1 is just above the hole and activates when there is insufficient light. Place the LDR1 in such a way that normal light falls on it but LED1 light does not fall on it. The front panel of

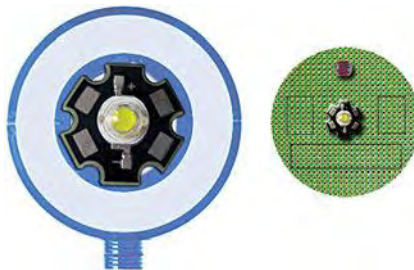


Fig. 5: Proposed front panel

the box as per author's suggestion is shown in Fig. 5.

As the finished system is a small and easy-to-use portable LED light, it can also be used for interior and exterior applications where a standard USB port is available. For example, you can use this as a book-reading light by using a smartphone power bank/USB mobile phone charger. However, try to use a suitable light diffuser with the white power light source for effective protection of your eyes. **EFY**



T.K. Hareendran is an electronics hobbyist, freelance technical writer and circuit designer

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