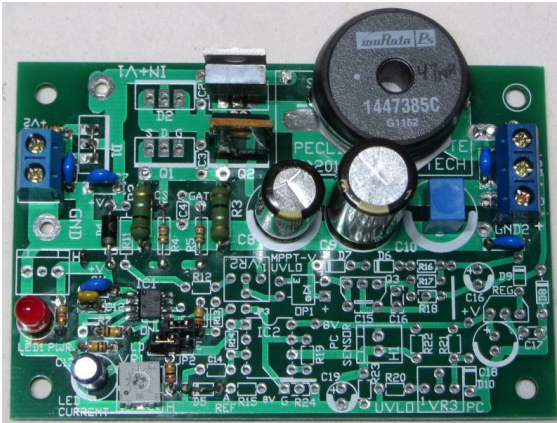


High Current LED Driver



LEDs require a constant current power source for proper, reliable operation due to its rapid increase in current with a small rise in voltage (I-V plot) near its nominal operating voltage range. Over-powering LEDs can lead to thermal over-loading and LED failure. Onstate CIR-PECLD high-power LED driver module uses the Microchip (Supertex) HV9910B/HV9916B switch-mode, universal LED driver IC for high-efficiency, simple design and reliable operation. It also has an optional op-amp circuit for external sensor (photocell) on/off and UVLO battery protection. The module can be connected to microcontrollers for intelligent operation.

Specifications:

- Input voltage: 12-40VDC. Up to 60VDC (specific setup)
- Output: 7-35V, depending on LED array.
- Current: Constant-current, 5.0A-10A, 15A (specific setup)
- Design: HV9910B/HV9916B LED driver and LM258 dual op-amp
- Topology: Hysteretic, step-down (buck) DC-DC converter
- Frequency: 20kHz-200kHz (recommended)
- Dimming: HV9910, PWM ON/OFF, Analog (0-0.25V)
HV9961, PWM ON/OFF, Analog (0-1.5V, full OFF at 0V)
- Switching: External N-CH MOSFET, non-synchronous

Applications:

- High-power LED driver (100W+)
- External controlled power switch
- Solar battery charging/power
- CCTV IR LED light
- Automatic night lighting
- Integrate into LED control applications
- Op-amp for various sensing applications

- PCB: 1/16" FR4, 1oz Cu, Lead-free, SMOBC
- Plating: 2 layers PCB with through hole plating
- PCB Size: 3.60" (91.4mm) x 2.42" (61.5mm)
- Mt Holes: 4x 140mil (3.56mm) at 3.20"x2.00" spacing.
- Panel: 2x2 V-scored

