

EDC-LL324

## Intelligent 4 Channel LED Driver IC

The EDC-LL324 is a fully integrated LED driver IC, designed for four independent LED strings. The IC can drive constant current in buck or boost topology using peak or valley current regulation.

### APPLICATION CIRCUIT EXAMPLE

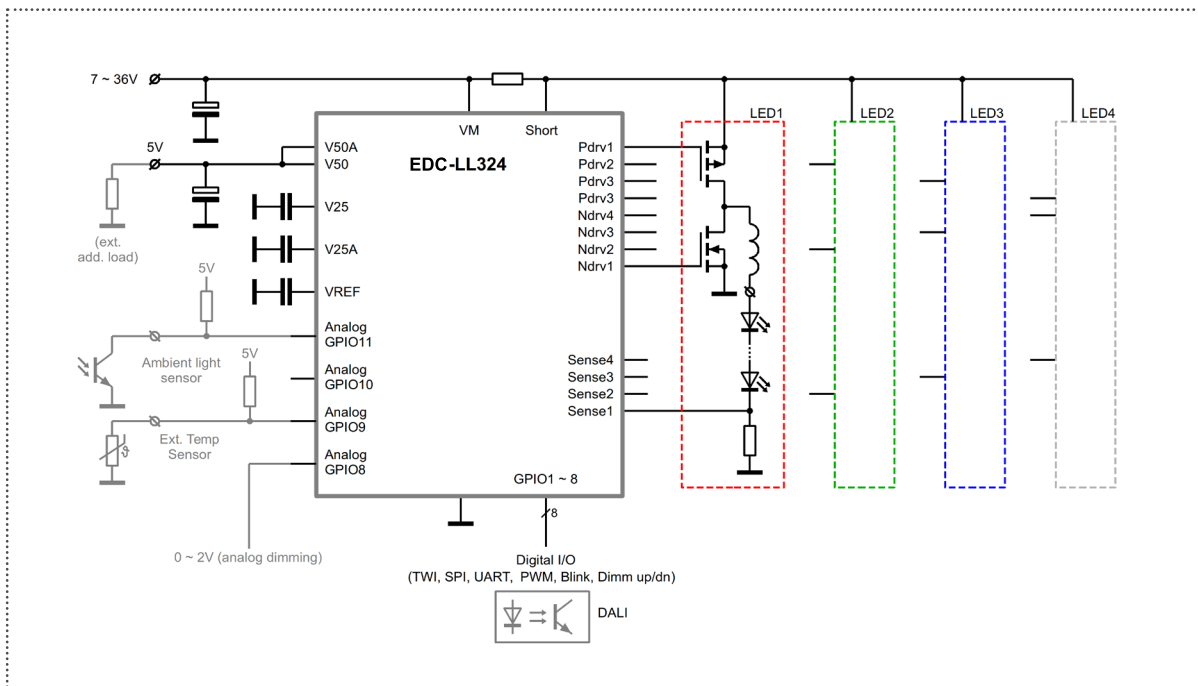
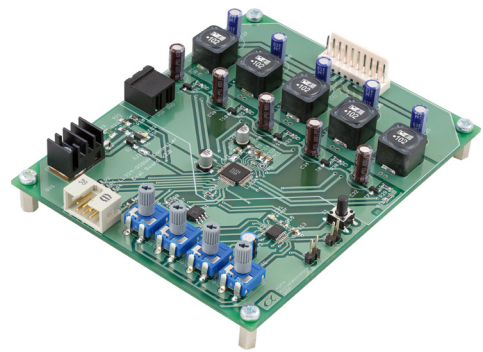


Figure: Simplified application example

## FEATURES

- Supply voltage: 7V ... 36V
- Internal 5-V linear regulator
- 4 N-channel MOSFET driver
- 4 P-channel MOSFET driver
- 4 adjustable PI regulators
- Fixed frequency PWM engine up to 200kHz
- 16-MHz 8-bit AVR compatible MCU
- 10-bit 2-MSPS ADC
- 4 current sensing amplifiers
- 8 kB OTP memory
- External EEPROM option
- Internal oscillator (2%)
- SPI, I<sup>2</sup>C, UART
- 8-bit timer, 16-bit timer
- 12 GPIO (4 thereof analog inputs)
- Synchronous rectification option
- Chip-temperature monitor
- Thermal surveillance of LEDs
- Supply voltage monitor
- Ambient temperature range -25°C ... 140°C
- TQFP48 package, dimensions: 7 mm x 7 mm x 1 mm
- RoHS compliant



## ORDERING INFORMATION

EDC-LL324-ITQ48T (TQFP48 - shipment in trays)

## DEVELOPMENT TOOLS

- Data Sheet: EDC-DS-LL324
- AVR<sup>®</sup> GNU C-Compiler and debugger
- Programming and debug interface (programmer or USB interface)
- Evaluation board

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