

## Features

- Supply Voltage Range 4.5V to 36V (max. 40V)
- Three Linear Current Drivers (up to 3\*200mA)
- Parallel Output Operation for up to 600mA
- Thermal Management Option per Channel
- Integrated 3-Phase PWM Generator for e.g. Tail/Stop Lighting
- Diagnosis supported for
  - LED Drivers (incl. configurable Thresholds)
  - IR Current Configuration
  - Junction Temperature including Derating
- Configurable Fault-Handling Modes
  - "Failure Feedback Mode" (FFM)
  - "Single Lamp Behaviour" (SLM)
- Diagnostic RUN Bus to link ICs into Clusters e.g. built using E522.60/E522.8x/E522.9x Products
- External Reference Voltage / Derating Supported
- Low-Power Standby / Sleep Mode
- AEC-Q100 Automotive Qualification

## Applications

- Automotive LED Lighting like Rear Lighting
- Turn Indicators, Day-Running Light
- Medium Current Interior Lighting
- Industrial LED Applications

## General Description

E522.60 devices provide high-voltage linear current drivers suitable for e.g. LED lighting applications up to 3x200mA. E522.60 features 'one-resistor' common current configuration at reduced effort. Integrated diagnostics support automotive requirements together with a fault-bus "RUN" to link ICs.

Two external configurable modes of fault handling allow

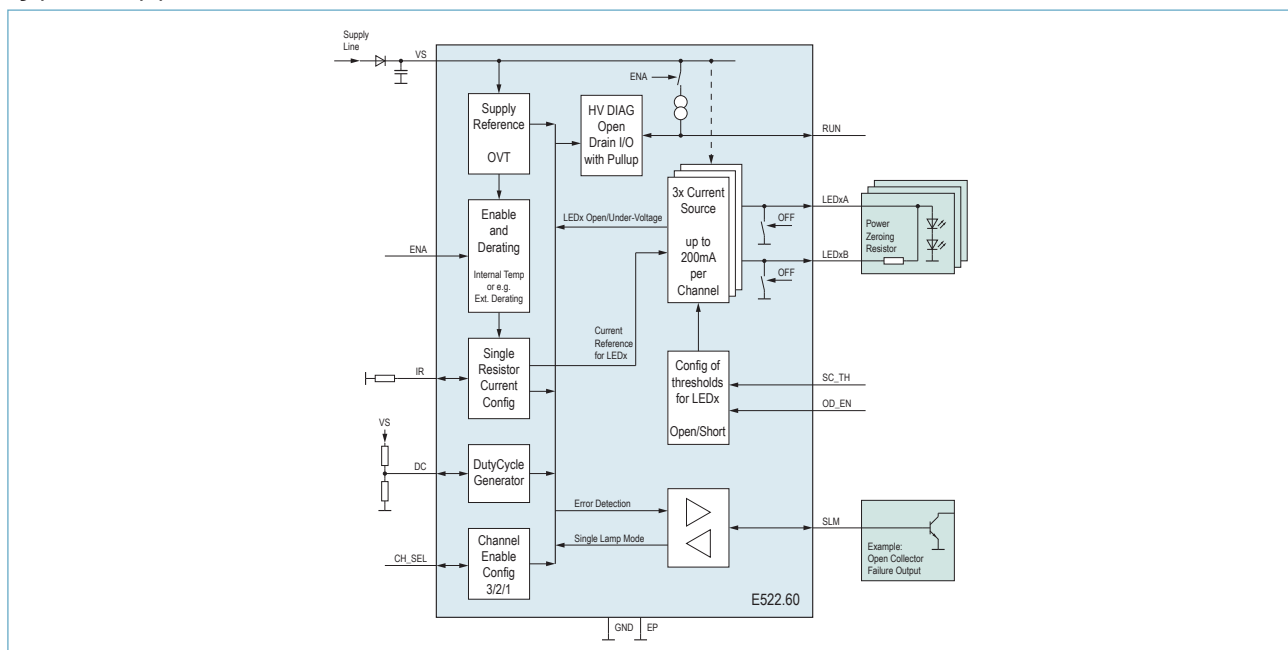
- "Failure Feedback Mode" FFM operating channels in case of errors, with error signalization
- "Single Lamp Mode" turning all linked E522.60 channels 'off' in case of errors

Integrated out-of-phase PWM duty-cycle generation simplifies supply-line filtering in case of dimmed operation. Low-component-count switching between continuous operation (e.g. STOP light) and PWM dimmed operation (e.g. TAIL light) is supported. Robust power management is provided per channel to extend the usable range of supply voltage range and/or power - combined with excellent low-drop performance and flexibility in LED voltage per channel. Simple shunt resistors share power with the IC package. Reduce PCB hotspots by channel-individual heat spreading. Derating for internal reference voltage increases robustness of E522.60 systems in case of abnormal operation conditions. Further flexibility for e.g. advanced thermal handling is provided by analog reference voltages via high-voltage ENA input.

## Ordering Information

Product ID	Temp Range	Package
E52260A96E	-40°C to +125°C	SOIC-16n EP

## Typical Application Circuit



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