Features
- Three integrated Linear Current Drivers (3*60mA)
- Parallel Output Operation for up to 180mA
- Low Power Standby / Sleep Mode
- Operating Input Voltage Range 5V to 25V, max. 40V
- External Reference Voltage / Derating Supported
- Common PWM Dimming (All channels in parallel)
- Diagnostic Functionalities (LED Driver Open/Short, IR Config Open/Short, Junction Temperature, Supply Voltage)
- Diagnostic Bus to link ICs
- “Single Lamp Behaviour” implemented
- AEC-Q100 Qualification

Applications
- Automotive LED Lighting, Rear Lighting
- Turn Indicator Driver
- Low Current Interior Lighting
- Industrial LED Applications or simple RGB Drivers

General Description
E522.84/85/86/87 family devices provide triple linear current controller for LED driving (standalone driver or LED cluster). Diagnostic features are provided to meet automotive requirements, together with a communication interface “RUN” to link ICs to generate more than three channels, supporting common current configuration per IC and including digital PWM dimming via fast ENA.

“Single Lamp Mode” allows to simulate the fail-behaviour of a single bulb to e.g. meet legal restrictions regarding lighting.

Internal derating for reference voltage and overtemperature shutdown for extreme temperatures >180°C protect E522.8x in case of abnormal operation conditions.

A high voltage capable input ENA can be used to digitally enable or disable E522.8x. In addition, this input may be used as analog reference voltage input, e.g. to realize thermal derating.

Ordering Information
<table>
<thead>
<tr>
<th>Ordering-No.</th>
<th>Temp Range</th>
<th>Package</th>
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<tbody>
<tr>
<td>E52284A80D</td>
<td>-40°C to +150°C</td>
<td>SOIC8EP</td>
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<td>E52285A80D</td>
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<td>E52287A80D</td>
<td>-40°C to +150°C</td>
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</tr>
</tbody>
</table>

Typical Application Circuit
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