L4984D CCM PFC Controller

Current-mode PFC controller operating with line-modulated fixed-off-time control
Compact and versatile current mode CCM PFC

Available in an ST proprietary SSO10 Halogen Free package
### Features and benefits

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
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<tr>
<td>• Proprietary LM-FOT modulator for nearly fixed frequency operation</td>
<td>• Simple design and reduced BOM</td>
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<tr>
<td>• Fast bidirectional input voltage feed forward ((1/V^2))</td>
<td>• Mains drops and surges rejection</td>
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<td>• Soft start</td>
<td>• Perfect inrush energy management</td>
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<td>• Proprietary THD optimizer circuit</td>
<td>• Enhanced performance</td>
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<td>• Full set protections embedded:</td>
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<tr>
<td>1. Feedback loop failure</td>
<td>1. Avoid bulk capacitors burning and down stream converter damaging</td>
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<td>2. Over voltage protection</td>
<td>2. Improved design reliability</td>
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<td>3. Inductor saturation</td>
<td>3. Avoid MOSFET damage</td>
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<td>4. AC brown out</td>
<td>4. Avoid bridge, inductor and MOSFET damage</td>
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Why move to L4984D

Simple device, high performance:
- L4984D is the right solution for middle-high power SMPS and is the best trade off between full set features, performance and price, form factor

Higher power density:
- Thanks to its ST proprietary package (10 pins in a SO8 body) and driving capability is able to address a wide range of applications from simple, such as high-end game consoles, desktop, and workstation to the more complex high-end servers, EV battery chargers, solar inverters or SMPS for data centers.
EVL4984-350W 350 W demo board - data

**PF vs. output power**

- PF vs. output power for different voltages and frequencies:
  - PF @ 100Vac - 50Hz
  - PF @ 115Vac - 60Hz
  - PF @ 230Vac - 50Hz

**THD vs. output power**

- THD vs. output power for different voltages and frequencies:
  - THD @ 100Vac - 50Hz
  - THD @ 115Vac - 60Hz
  - THD @ 230Vac - 50Hz

**Eff vs. output power**

- Efficiency vs. output power for different voltages and frequencies:
  - Eff @ 100Vac - 50Hz
  - Eff @ 115Vac - 60Hz
  - Eff @ 230Vac - 50Hz
Thank you!

ST stands for life.augmented