BRD8049/D
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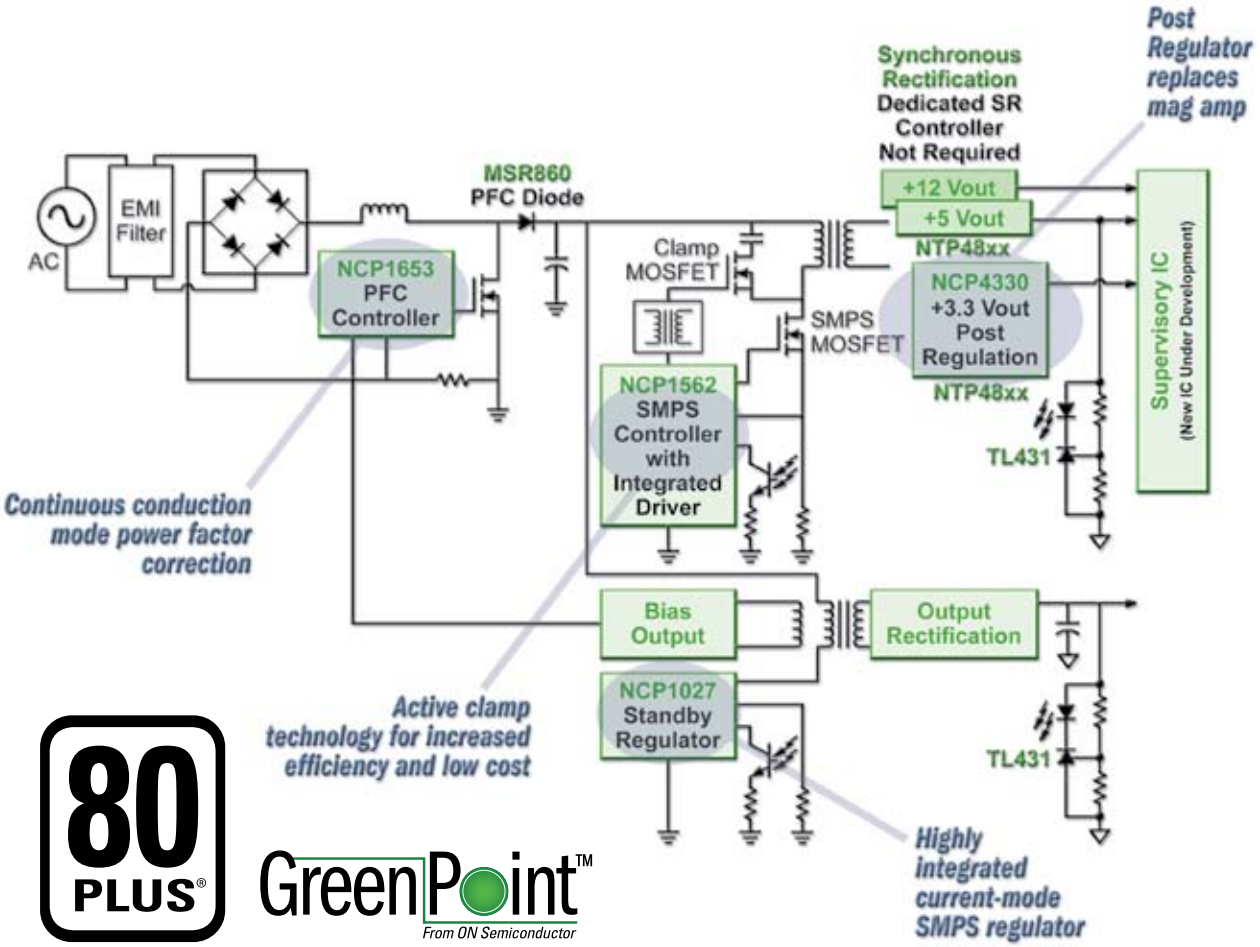
300 W 80 PLUS® ATX Reference Design

A High-Efficiency GreenPoint™ Solution from ON Semiconductor



80 PLUS®

GreenPoint™
From ON Semiconductor

Production Ready 80 PLUS Reference Design

- **Achieves >80% efficiency with room to spare**
- **Production ready design accelerates time-to-market**
- **Advanced architecture is at cost parity or lower compared to other topologies for similar efficiencies**
- **Meets IEC1000-3-2 requirements**

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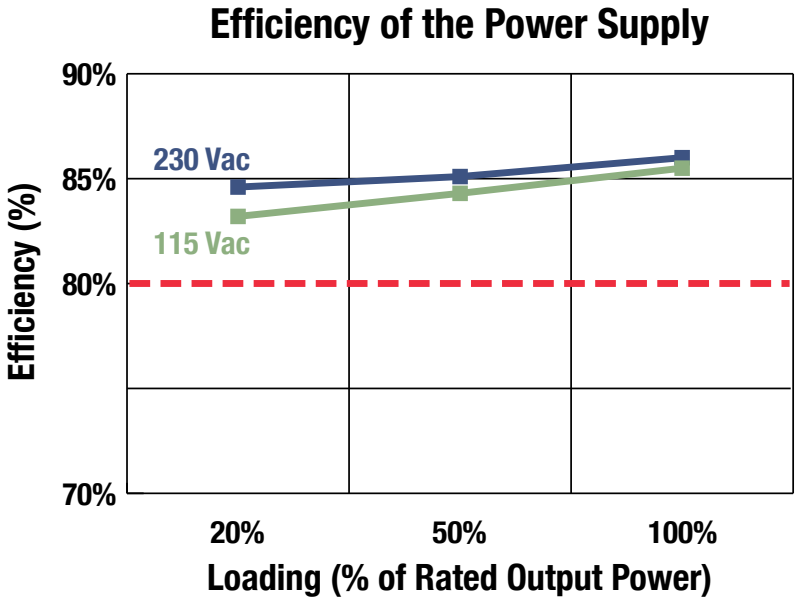

NCP1653 – Compact PFC Controller is the ideal solution for continuous mode (CCM) PFC applications such as ATX Power Supplies. This device enables the inclusion of a PFC front-end into an ATX power supply by simplifying the design through integration (reduces part count) and providing a robust, cost effective front-end without range switches.

NCP1562 – Active Clamp Controller is a highly integrated controller for the main stage (SMPS section) of the ATX Power Supply. It can be used in applications with or without the PFC front-end. Thanks to its integrated drivers, soft-switching, and accurate duty-cycle control amongst other unique features (such as soft-stop), the NCP1562 significantly enhances the efficiency and ruggedness of the power stage without additional cost.

NCP1027 – Standby Controller is optimized for the standby/bias converter section of the ATX Power Supply. Its highly integrated features and the integrated HV FET on the silicon makes it an ideal and cost-effective option. The NCP1027 can deliver 15 W of standby power at high efficiency across the entire line conditions (85 V to 265 V AC).

NCP4330 – Post Regulator is a synchronous and more efficient post-regulator that replaces the Mag-Amp solution for generating multiple-outputs in an ATX Power Supply. The NCP4330 can also lower the cost of the overall solution while enabling this higher efficiency and makes it an ideal solution for achieving higher than 80% efficiencies.