STMicroelectronics

Product Number: EVL6564-100W

L6564 transiotion mode PFC evaluation board

Description

The EVL6564-100W demonstration board implements a 100 W power factor correction (PFC) pre-regulator, continuous power, on a regulated 400 V rail from a wide range mains voltage and provides for the reduction of the mains harmonics, which allows meeting the European EN61000-3-2 or the Japanese JEITA-MITI standard. The regulated output voltage is typically the input for the cascaded isolated DC-DC converter that provides the output rails required by the load.

The board is designed to allow full-load operation in still air.

Key Features

- Line voltage range: 90 to 265 Vac
- Minimum line frequency (f_L): 47 Hz
 Regulated output voltage: 400 V
- Regulated output voltage: 40
 Rated output power: 100 W
- Maximum 2 f₁ output voltage ripple: 20 V peak-to-peak
- Hold-up time: 10 ms (V_{DROP} after hold-up time is 300 V)
- Minimum switching frequency: 40 kHz
- Minimum estimated efficiency 92% (at Vin = 90 Vac, Pout = 100 W)
- Maximum ambient temperature: 50 °C
- PCB type and size: Single-side, 35 μm, CEM-1, 90 x 83 mm