

90W, 19V Power Adapter Demo Design Using the CS1500 Digital Power Factor Correction IC

Main Features

■ Universal Input

Mains Range: 90~265 VACLine Frequency: 45~65 Hz

☐ Rated Output Specification: 19 V, 90 W

☐ EN6100-3-2 Class-D Compliance

☐ Efficiency: 87% @ 90 W, 230 VAC

■ Low No-load Power Dissipation

□ Low PFC Component Count

☐ Board Dimension: 50 mm x 142 mm

General Description

The CRD1500-FB circuit has two stages: a digitally controlled front-end PFC and a quasi-resonant flyback converter. The CS1500 is a high-performance power factor correction (PFC) controller for universal AC input that uses a proprietary digital algorithm with variable ontime, variable frequency, & DCM, which ensures unity power factor.

The quasi-resonant flyback converter uses the L6566A flyback controller and is dedicated to controlling the circuit's standby/normal operation mode, which controls the on/off state of the PFC stage by means of a dedicated pin (Vcc_PFC), which helps to achieve an excellent efficiency at light-load and no-load conditions.

To get the complete data sheet, please visit: www.cirrus.com/PFCdatasheets/CRD1500-FB



Actual Size: 50mm x 142mm

