

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

### **Main Features**

- ❑ Universal Input
  - Mains Range: 90~265 VAC
  - Line 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 on-time, 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-41](http://www.cirrus.com/PFCdatasheets/CRD1500-FB-41)



Actual Size:  
50mm x 142mm