

## **CS1500 90W, High-efficiency PFC w/ LLC Resonant Converter Reference Design**

### **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: 91% @ 90 W, 230 VAC
- ❑ Low No-load Power Dissipation
- ❑ Low PFC Component Count
- ❑ Board Dimension: 61 mm x 135 mm

### **General Description**

The CRD1500-90WLLC circuit has two stages: a digitally controlled front-end PFC and a resonant LLC 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 resonant LLC converter uses the L6599A controller in the second stage.

To get the complete data sheet, please visit:

[www.cirrus.com/PFCdatasheets/CRD1500-90WLLC](http://www.cirrus.com/PFCdatasheets/CRD1500-90WLLC)



AC Line  
Input

Actual Size:  
61mm x 135mm