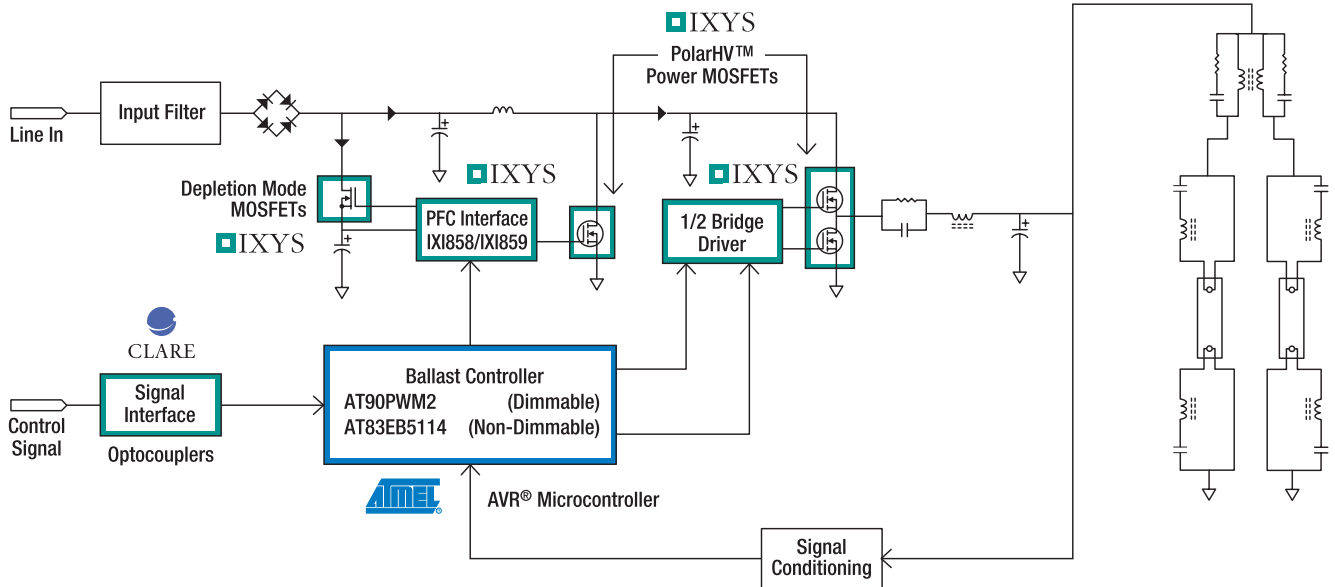


# Rapid Design of Flexible, High Efficiency Lighting Solutions

## Dimmable and Non-Dimmable Reference Designs



## IXYS mixed signal and power products plus Atmel microcontrollers provide a near complete ballast solution.

### PolarHV™ Power MOSFETs - IXTP3N50P

- Reduce conduction and switching losses
- Reduced cost vs. power handling
- Improved reliability and ruggedness

### Depletion Mode MOSFETs - IXTP02N50D

- Reduce line interface cost and complexity
- Reduce high line power consumption

### Digital Interface ICs - IXI858/859S1

- Provides overhead and interface req'ts for digitally controlled PFC systems

### Half-Bridge Drivers - IXD611S1

- Non-latching level translation
- Superior negative transient immunity
- 50kV/us dV/dt noise immunity

### Clare Optocouplers - LDA111S

- Reliable high voltage signal isolation

### AVR® Microcontrollers

- ATP90PWM2 for Dimmable Ballast
  - 8-K Byte Flash
  - Dali Protocol
  - 12-bit PWM generators
  - 10-bit A-to-D converter
- AT83EB5114 for Non-Dimmable Ballast
  - Integrated C51 Microcontroller
  - 4-Kbyte ROM
  - 256-byte EPROM
  - 16-bit PWM generators
  - 10-bit A-to-D converter
- Dedicated peripherals for PFC implementation

Reference designs available for qualified designers

Dimmable: IXYS PN EVLB001, Atmel PN ATAVRFBKIT

Non-Dimmable: IXYS PN EVLB002, Atmel PN AT89RFD-10



[www.ixys.com](http://www.ixys.com)



[www.atmel.com](http://www.atmel.com)

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