

5W Standby Transformer-Less MuxCapacitor® AC Power ICs

MuxCapacitor AC Standby

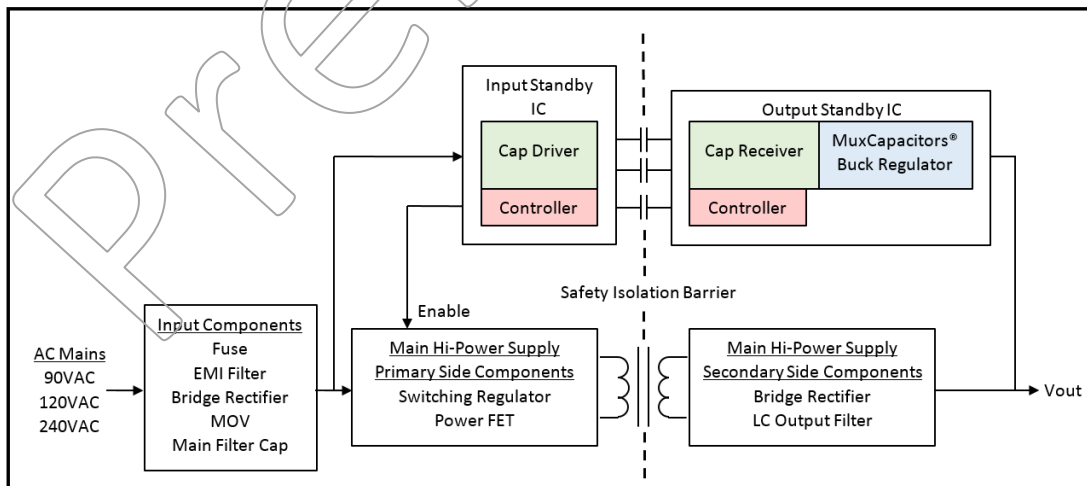
The Helix Semiconductors Transformer-Less MuxCapacitor Standby two chip-set provides a parallel path to an existing high power supply, solving low-power efficiency and eliminating no-load waste.

The chip-set includes an intelligent capacitive power driver, MuxCapacitor stages and COT Buck Regulator timing & control. It automatically sources power through its path when load demand drops into the high-power supply's inefficient range. The current threshold at which switch-over occurs is configurable.

Applications

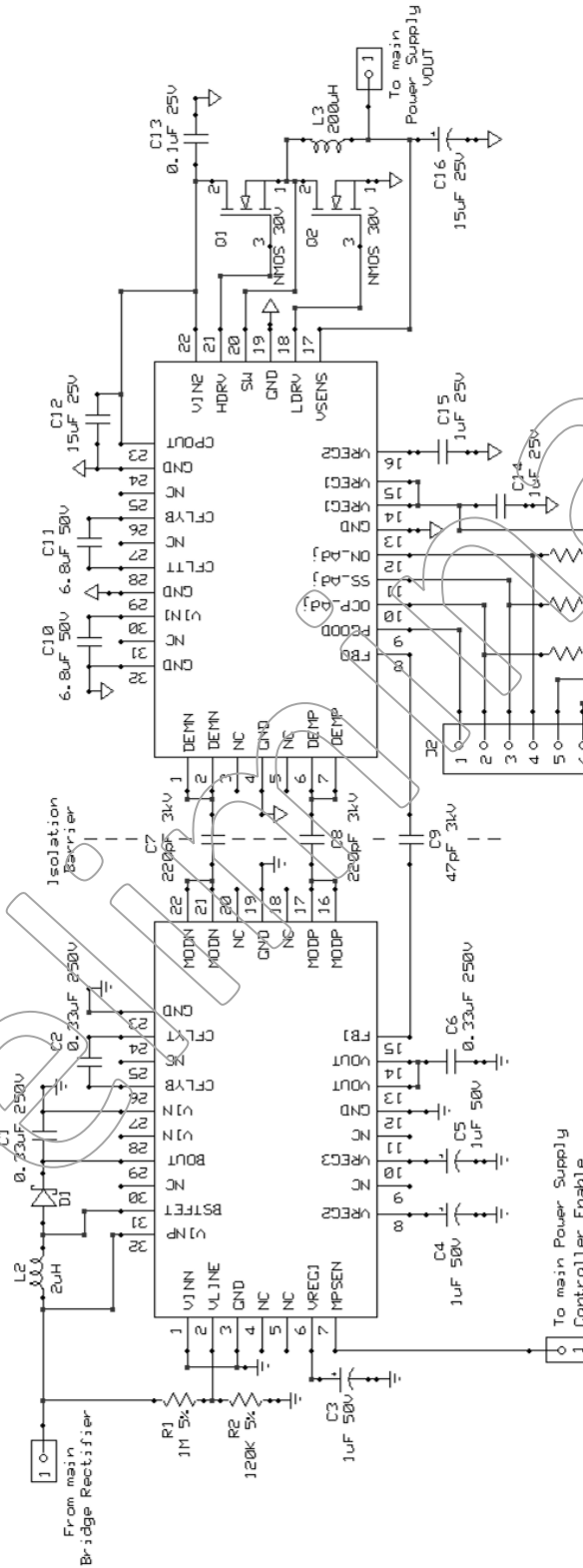
- Gaming PCs, Game Consoles
- Servers
- Large Flat Panel Displays
- Power Inverters
- Consumer Appliances

System Block Diagram



Features

- Universal 90, 120, 240VAC Input Voltage
 - Auto Enable to Main Power Supply
 - 3kV Capacitive Isolation
 - Multi-stage MuxCapacitor
- Configurable 5W Output Voltage
 - 1.8 - 15V, ±1% Output Tolerance
 - COT Buck Regulator
- Offline Operation
 - 1/2mW Power Consumption
- Idle Operation: Active, Non-switching
 - 10mW Power Consumption
 - Always On Output
- >90% Efficiency at all loads
- Sequenced Soft-Start
- Power Good Indicator
- Fault Detectors
 - Input Under Voltage
 - Output Over Voltage
 - Output Over Current
 - Thermal Shutdown
- User Configuration Interface



Application Schematic