



## HIGH PERFORMANCE RESONANT POWER SUPPLIES

Comprehensive power supply technologies developed in the AGH University of Science and Technology (Krakow, Poland)

improved clever control

standard frequency-modulation techniques

## EMC COMPLIANCE

VVHY:

To make EMC compliance easier

HOW?

- Sinusoidal currents
- Uninterrupted current flow
- Zero Voltage Switching
- Highly isolated DC / DC utility power converter to minimize conducted disturbances
- Quality factor limiter, damping (not clipping) the amplitudes of sinusoidal currents

## MULTI - OUTPUT HIGHLY ISOLATED DC/DC CONVERTER

WHY?

To easily power the gate drivers

HOW?

- Multi output is cost effective
- High isolation (>5kVAC)
- Low parasitic capacitance:
- in-out < 15 pF
- Improves reliability and makes
   EMC compliance easier
- Soon to be patented

Patent pending technology

## NEW TOPOLOGIES WITH QUALITY FACTOR LIMITER To provide energy-aware hardware overcurrent and overvoltage protection Almost lossless recirculation of excess energy during transient states back to the power source Reduction of quality factor resulting in damped rather than clipped currents Two new topologies with an integrated quality factor limiter: series-parallel LCLC and series LLC utilizing the multi-winding inductor



