High Efficiency Power Supply Units

It is sometimes not appreciated that although efficiency in power supply systems has been improving for close to 40 years, until relatively recently efficiency, per se, was not directly a driver of design. The majority of improvements were effectively side effects of other trends, or, sometimes, despite other trends.

This white paper examines the evolution of high efficiency power supplies and the

1. Historical Technology changes that have brought about efficiency improvement
2. Market drivers for efficiency improvement
3. Regulatory changes
4. Environmental impacts
5. Specification Trade Offs
6. Design Techniques for higher efficiency

1. Historical Technology changes that have brought about efficiency improvement includes examination of evolution of
    a. Linear to Switch-mode power supply
    b. Component impacts
    c. Synchronous rectification
2. Market Drivers examines the efficiency demands of market in relation to and technology
3. Regulatory Changes examines the safety and EMI requirements of power supplies and how these affect efficiency
4. Environmental Impacts examines the move to “Green Energy”
5. Specification Trade Offs examines the positive and negative effects of efficiency improvements.
6. Design Techniques examines the topologies and components that make higher efficiencies possible.

Full White Paper is available from Excelsys Technologies. Contact info@excelsys.com for details on how to receive your full copy.