



**Figure 1** Digital-power controllers, such as Analog Devices' ADP1043, can simplify the incorporation of complex new-circuit designs within server power supplies. This two-stage dc/dc-controller design must drive and control seven FETs but can result in a power-supply efficiency increase of 1%. The design takes the input voltage from the power-factor-correction output bulk capacitor and buck-converts it down to a lower regulated voltage. The isolation stage now runs as a high-efficiency dc/dc converter running in an open loop.