Bus Converters Achieve Full Load Power Conversion Efficiencies Near 96%

The SQ60 series of isolated semi-regulated DC-DC converters for intermediate bus architecture applications accepts the full Telco input range of 36-75 V and provides a semi-regulated 12 V for point-of-load converters. These converters incorporate next-generation, board-mountable, fixed switching frequency technology, and use synchronous rectification to achieve full load power conversion efficiencies approaching 96%. The SQ60120ETA17 provides 204 W in an open-frame, eighth brick package with power dissipation so low that it does not require a heatsink. The 12 V quarter-brick offerings include: the 25 A/300 W SQ60120QEx25 bus converter, available in an open-frame or baseplated package; the SQ60120QPA28, a 28 A/336 W open-frame bus converter; and the 33 A/396 W SQ60120QPB33 baseplated converter. The SQ60060QPA55 is a 6 V bus converter in an open-frame configuration providing 55 A/330 W for lower bus voltage requirements.