Silanna Semiconductor | Power Management Re-Imagined

140W 1C USB-PD 3.1 EPR Evaluation Board using Silanna Semiconductor's High Frequency ACF Controller with Integrated GaN Primary FET and X-Cap Discharge Circuit (SZ1200-EVB02)

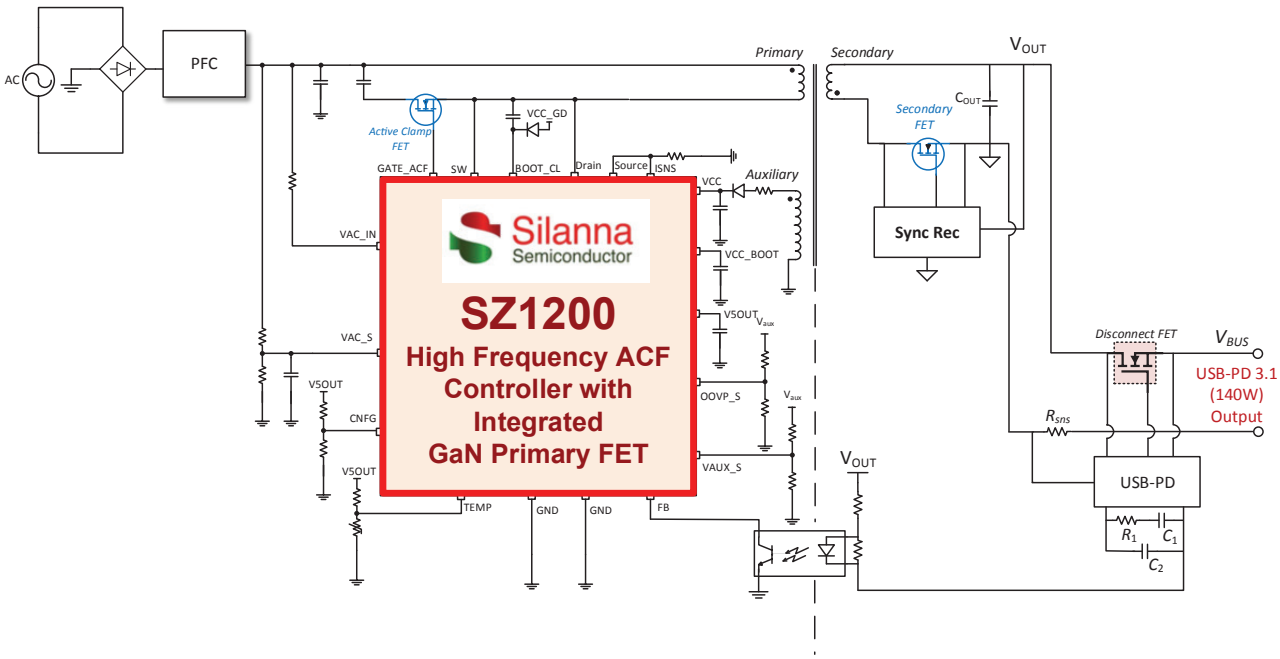
Silanna Semiconductor's SZ1200 delivers best-in-class power density and performance

Key Specs:

- Input: 90-265VAC
- Output Power: 140W Max
- Output Ports: 1C
- Type-C Single Port: 140W Max (5V/3A, 9V/3A, 15V/3A, 20V/5A, 28V/5A)
- Transformer: ATQ2818 for High Power Density Designs

Schematic

CO_2 Smart Power from Silanna Semiconductor



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For Sales and Applications Support: sales_am@silanna.com

For more information:
www.powerdensity.com

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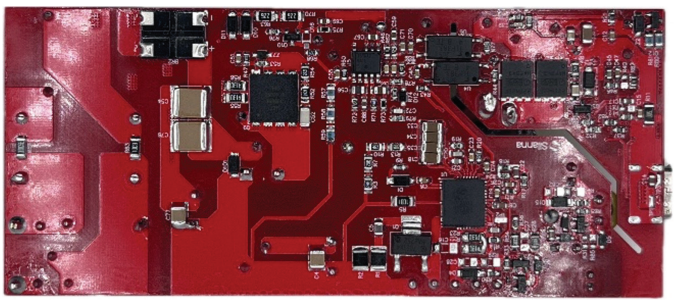
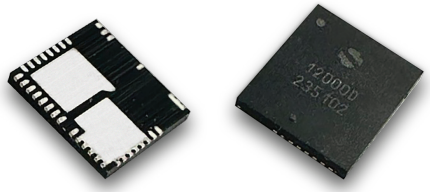
SZ1200-EVB02 Features:

- 140W 1C USB-PD 3.1 evaluation board using SZ1200 High Frequency ACF controller
- > 94.5% end-to-end peak efficiency
- < 75 mW no-load power consumption
- > 6 dB conducted EMI margin
- Very high density with ATQ2818 transformer
- Schedule
  - Engineering Sample Release in Apr'24
  - Production Release at the end of Q2'24

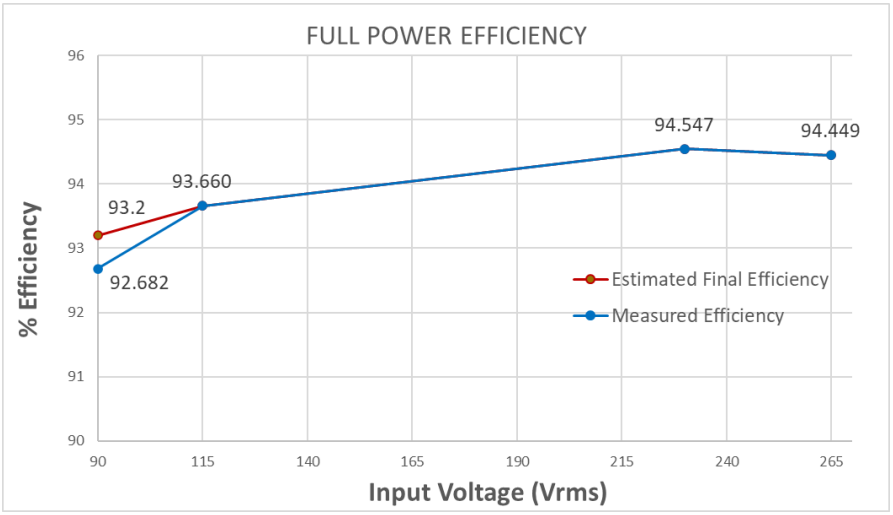


SZ1200 Features:

- Configurable high-switching-frequency operation (up to 250 kHz)
- Integrated 700 V GaN primary FET
- Integrated UHV X-cap discharge circuit, active clamp driver and start-up regulator
- Over 93% efficiency at low line
- Flat efficiency across universal input voltage (90 - 265 Vac) and loading conditions
- CCM for increased peak power delivery and better utilization of transformer core
- QR valley mode switching and boosting for low EMI and near-ZVS operation
- OptiMode™ cycle-by-cycle adaptive digital control
- Self-tuning valley detection
- OTP, OVP, OCP, OOPP and OSCP protection
- Space-saving 8 mm X 7 mm QFN Package



Preliminary Efficiency :



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