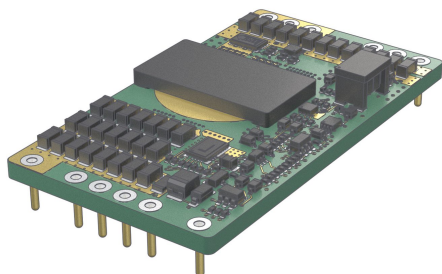


DCX200-GaN — GaN LLC DC-DC transformer

DCX200-GaN-Rx

Isolated/Unregulated: Fixed ratio, ZVS + ZCS

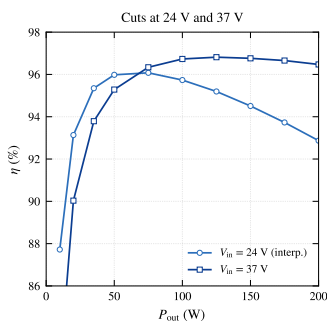
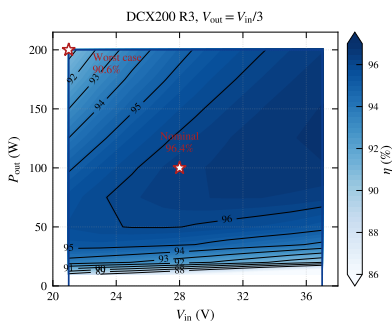


Ratings

Input	21 – 37 V
Output	V_{in} / N , $N = 2, 3, 4$
Power	+200 W
Current	up to 30 A
Resonant Frequency	500 kHz
Density	8 W/cm ³
Package	59 × 33 × 12.9 mm, 40 g
Isolation	1500 V DC, MTBF 1.5 Mh

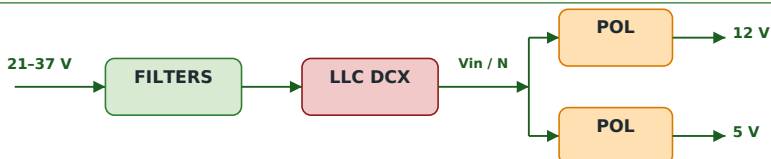
- **Full analog control:** Design based on qualified COTS components; can be reproduced in an equivalent CQ1 version with the same level of performance.
- **Self-oscillating:** Full Analog design, ZVS on primary side, ZCS on secondary side. Low EMI.
- **Fixed ratio** $\pm 1\%$, 1.5 % resistive drop, 30 mVpp ripple; R2T 14 V, R3T 9.33 V, R4T 7 V at 28 V.
- **Protections:** Adjustable OCP, adjustable UVLO, Enable.

Efficiency over the operating plane



R3 variant, efficiency measured on the breadboard (board at 105 °C, control included): 96.4 % at 28 V / 100 W; map over the operating plane and cuts at 24 V and 37 V.

Typical application



Intermediate bus architecture: input filter, DCX200-GaN LLC transformer and POL regulators. Paired with the FSBB200-GaN pre-regulator, the chain is regulated and isolated end to end at about 96 %.