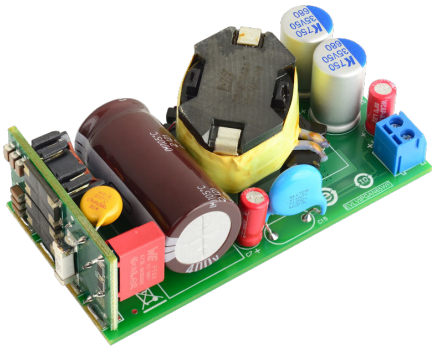
EVLVIPGAN65WF

Data brief

24 V / 65 W QR flyback converter based on VIPERGAN65W



Features

- Input voltage range: universal AC from 90 - 265 V_{AC} with 50 Hz - 60 Hz frequency
- Maximum output power: 65 W
- Output voltage: 24 V_{DC}
- Output current: 2.7 A
- Peak efficiency: > 92 %
- Key products: Power GaN IC: VIPERGAN65W; SR IC: SRK1001

Applications

- High-efficiency auxiliary power supply for appliances, industrial, and consumers.

Description

The EVLVIPGAN65WF is a 24 V / 65 W reference design set in isolated QR flyback topology, based on the VIPERGAN65W high-voltage converter. This controller combines a low-voltage PWM controller chip with a 700 V GaN HEMT in the same package and integrates:

- a complete set of features which help design high-efficiency and low-standby-consumption SMPS with a short bill of materials, for cost-effective and fast design: ZVS quasi-resonant operation with dynamic blanking time; feedforward compensation; valley synchronization adjustment; low quiescent current; advanced light load management.
- a complete set of protections which considerably increase end-product safety and reliability: output overvoltage protection (OVP), output overload/short-circuit protection (OLP), brown-in/out protection, input overvoltage protection (iOVP).

To increase the system efficiency, the secondary side rectification is implemented through a power MOSFET driven by the SRK1001 adaptive synchronous rectification controller.

Product summary	
65 W Adaptor	EVLVIPGAN65WF
Power GaN IC	VIPERGAN65W
Secondary-side synchronous rectification controller optimized for flyback converter	SRK1001

Product label

SUSTAINABLE TECHNOLOGY

1 Schematics

Figure 1. Input board circuit schematic

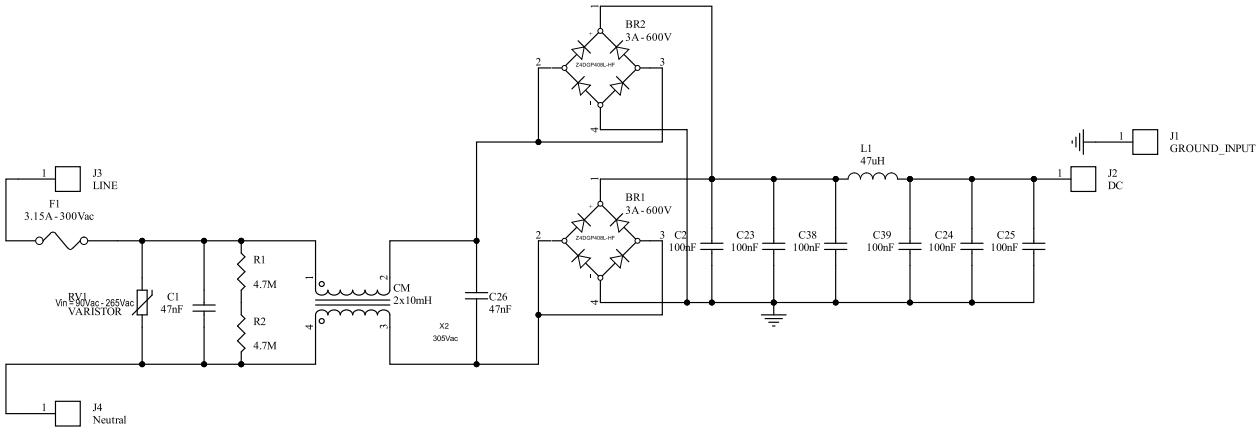
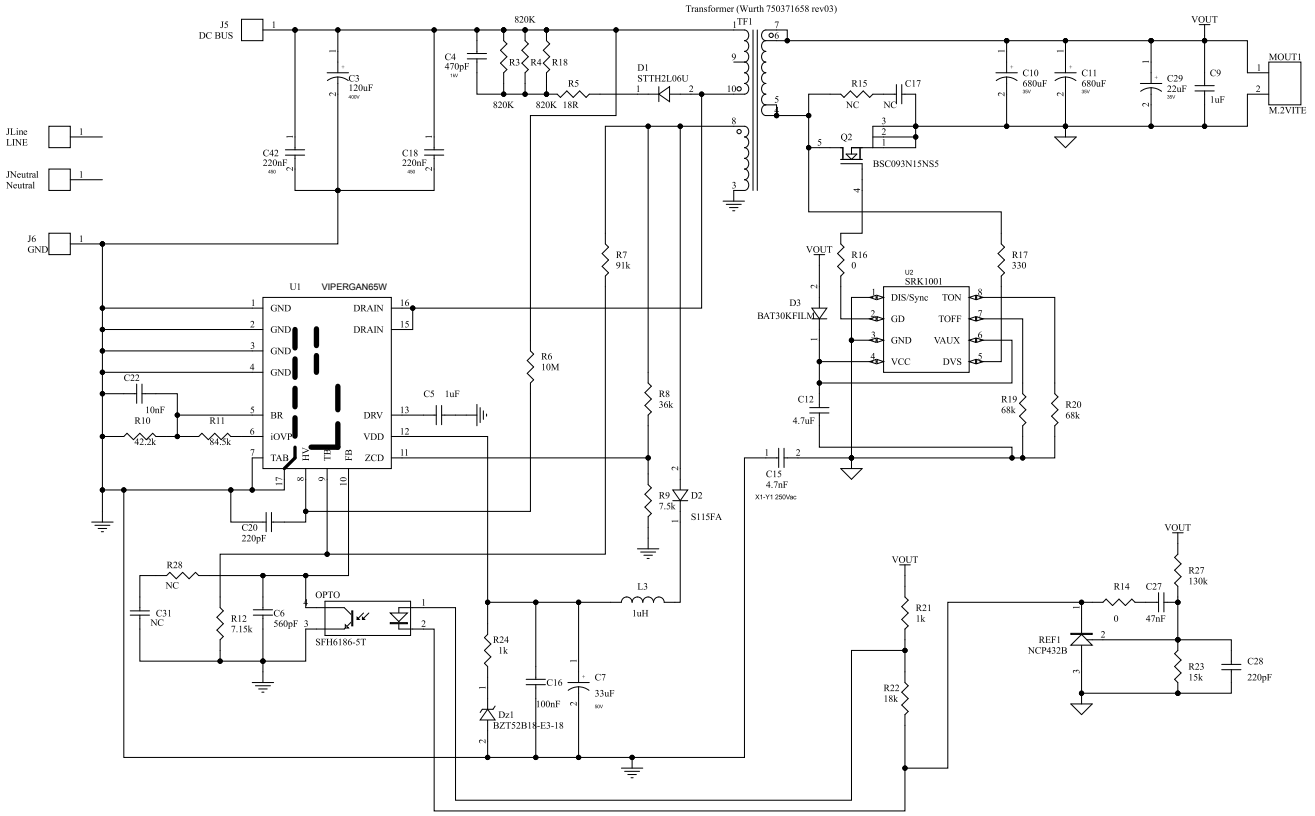


Figure 2. Main board circuit schematic



Revision history

Table 1. **Document revision history**

Date	Version	Changes
22-Sep-2025	1	Initial release.

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