40W QR Flyback Evaluation Board

EVAL_40W_19V_FLYB_P7
700V P7 TO220 FullPAK
700V P7 DPAK

Jared Huntington(IFAT PMM ACDC AE)

Rev 1.0

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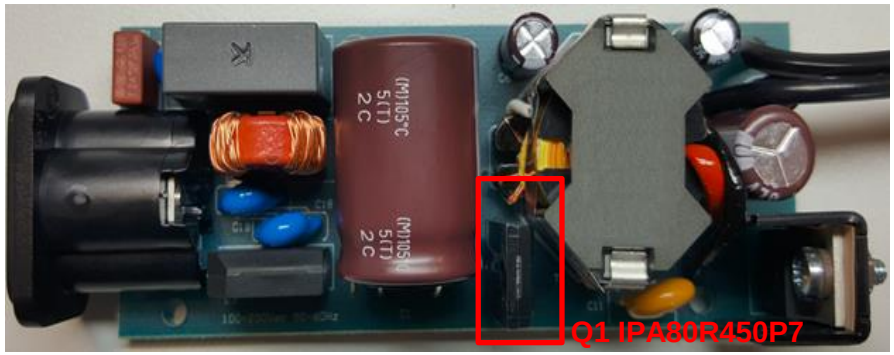
General

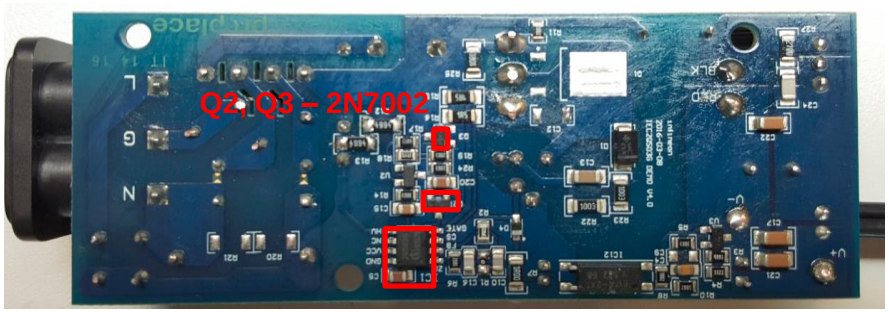
Description:

This 40W adapter evaluation board is intended to be a form, fit, and function test platform for charger and adapter applications to show the operation of the 700V P7 CoolMOS™ as well as the overall controller design. The evaluation board is designed around a Quasi-Resonant (QR) Flyback topology for improved switching losses which allows higher power density designs and lower radiated and conducted emissions. A 40W universal input isolated Flyback demo board with a 19V output based on the ICE2QS03G controller and the P7 MOSFET is described in this application note and test results are presented.

Summary of Features:

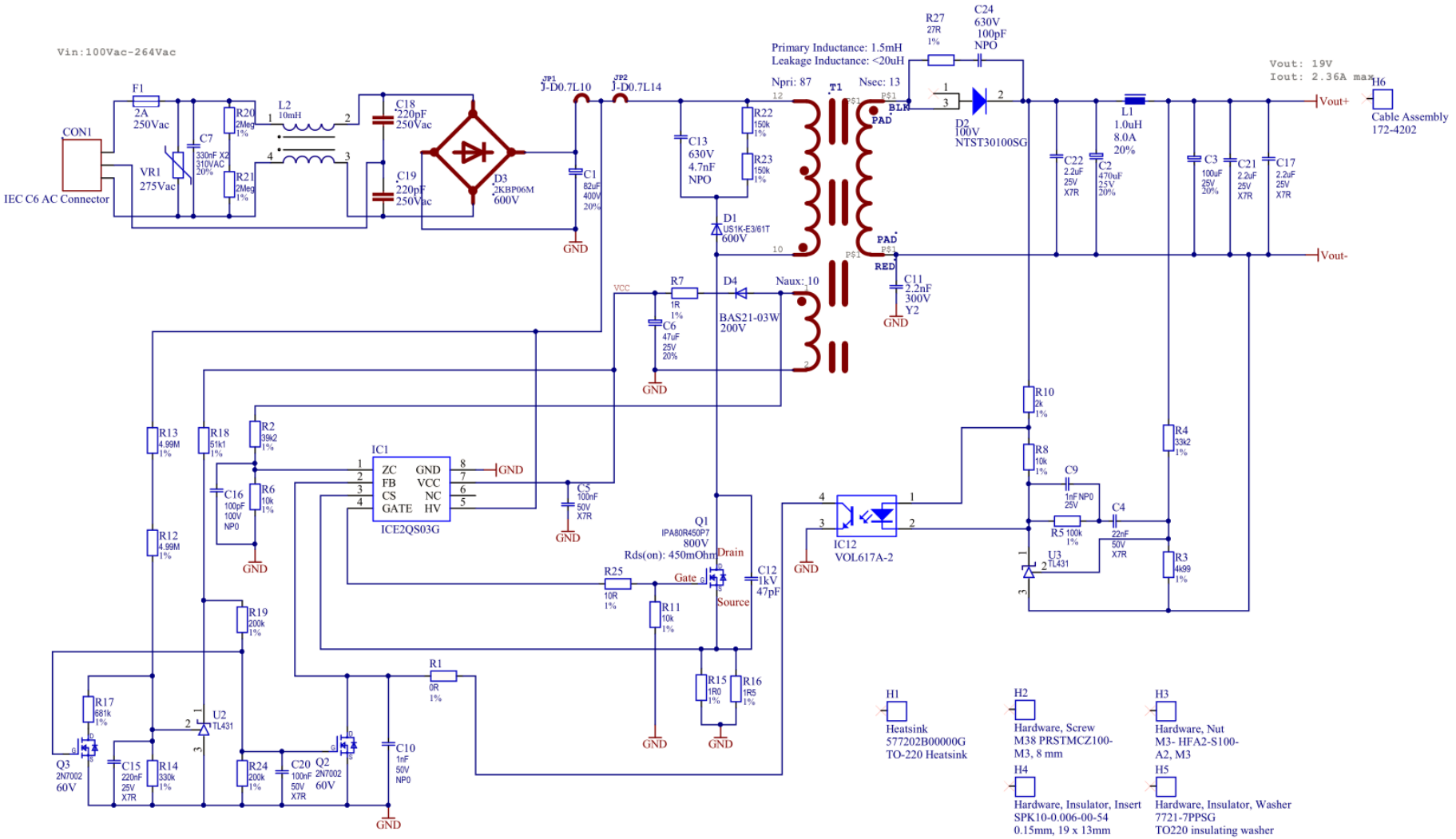
- Output voltage: 19 VDC
- Output current max: 2.1A
- Peak Efficiency 230 V_{AC}, 40 W 91.0%
- Peak Efficiency 120 V_{AC}, 40 W 89.5%





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Schematic



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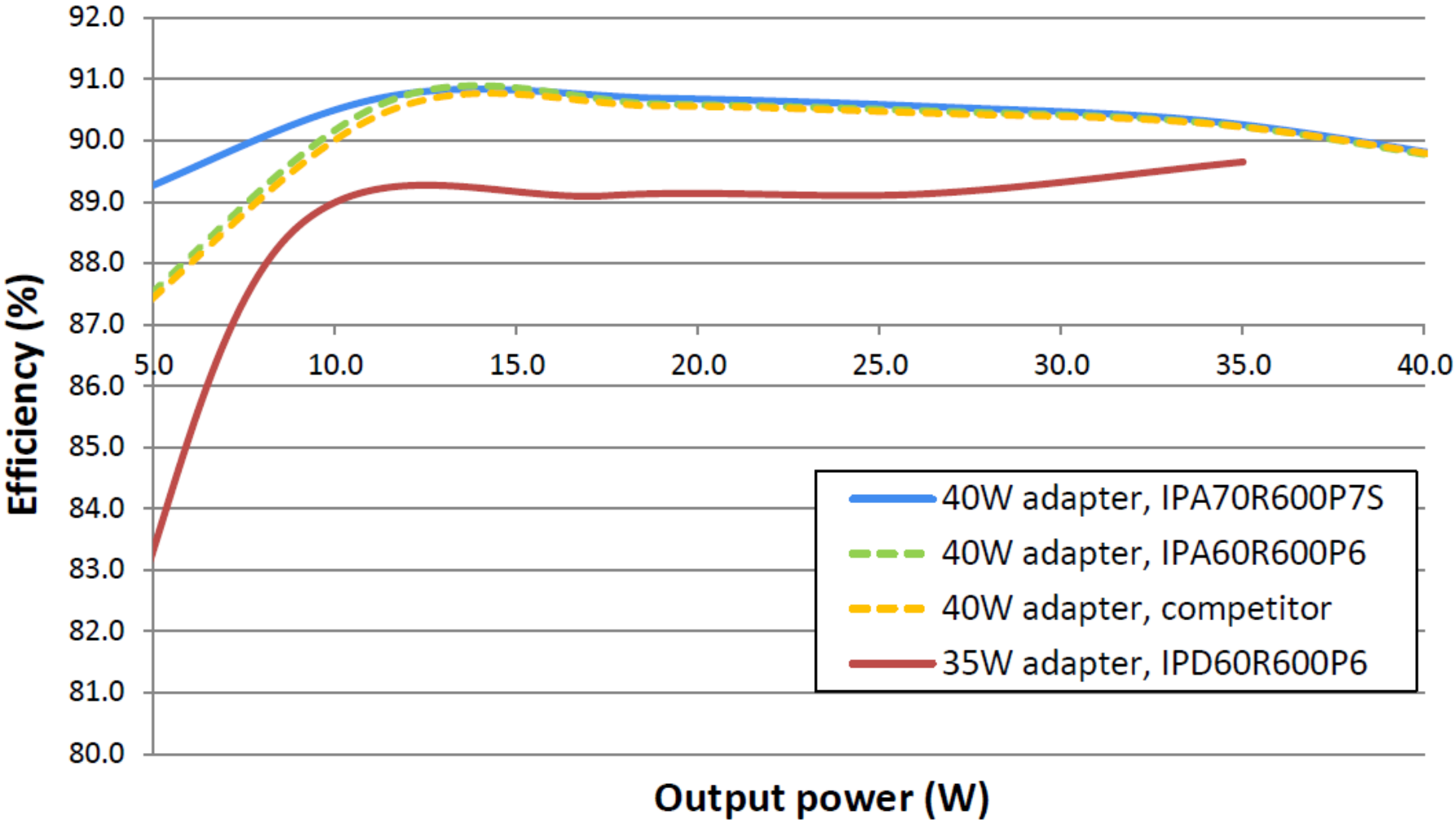
1 General Description

2 Efficiency Results

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Low line efficiency measured with IPA70R600P7

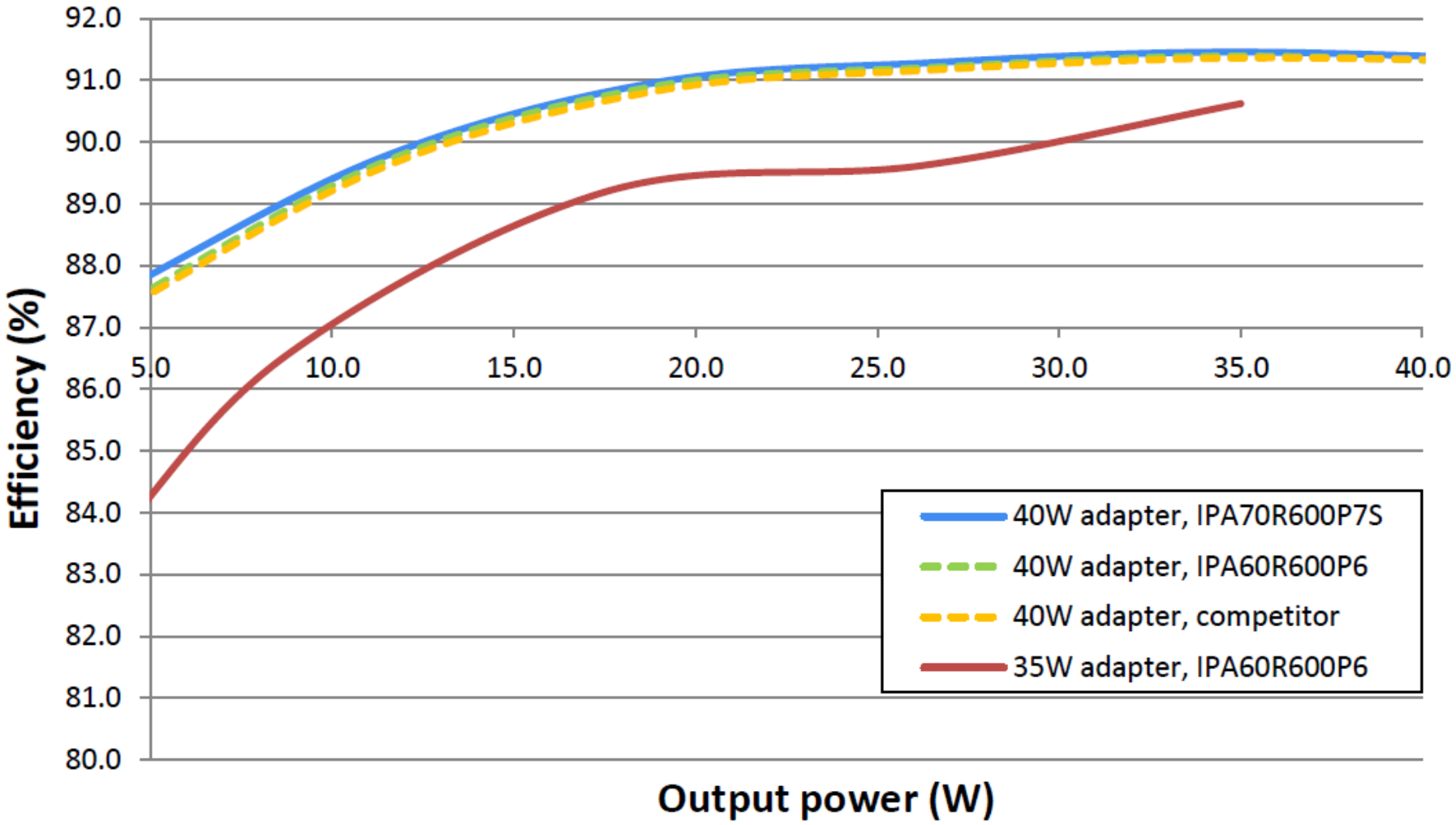
Vin =120VAC



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High line efficiency measured with IPA70R600P7

Vin =230VAC

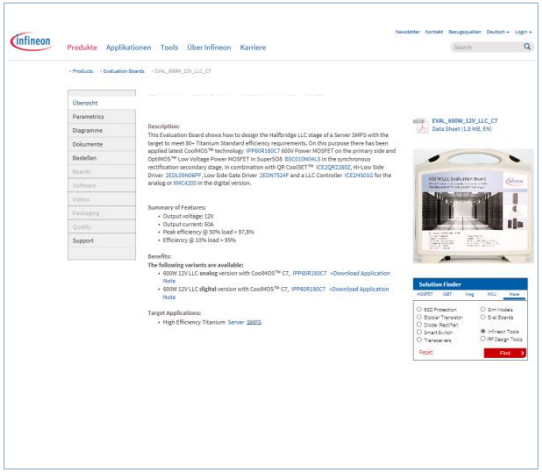


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Support Slides
40W Evaluation Board

Evaluation Board Page

- Technical Description
- Datasheets
- Parameters
- Related material
- Videos



- EVAL_40W_19V_FLYB_P7

Product Family Pages

- Product Brief
- Application Notes
- Selection Guides
- Datasheets and Portfolio
- Videos
- Simulation Models



- IPA70R600P7
- ICE2QS03G
- 2N7002

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