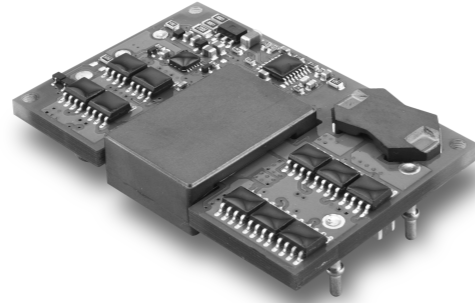


IBQ

S E R I E S

NEW

PRELIMINARY



180 TO 300W WIDE INPUT DC-DC CONVERTERS

Features

- 180 - 300W Isolated Output
- Efficiency to 95%
- Fixed Switching Frequency
- Input under-voltage Protection
- Over Temperature Protection
- Over Current Protection
- Remote ON/OFF
- Industry Standard Quarter-Brick Package
- Fully Isolated 2250VDC
- Output for Intermediate Bus Architectures With POL Converters

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT NO LOAD	INPUT CURRENT FULL LOAD	%EFF	SIZE
IBQ300-48S12	42.0-53.0 VDC	12VDC	0 - 25A	100mA	6510mA	95	QB
IBQ180-48S12	36.0-75.0 VDC	12VDC	0 - 15A	70mA	3989mA	94	QB

NOTE : Nominal Input Voltage : 48 VDC

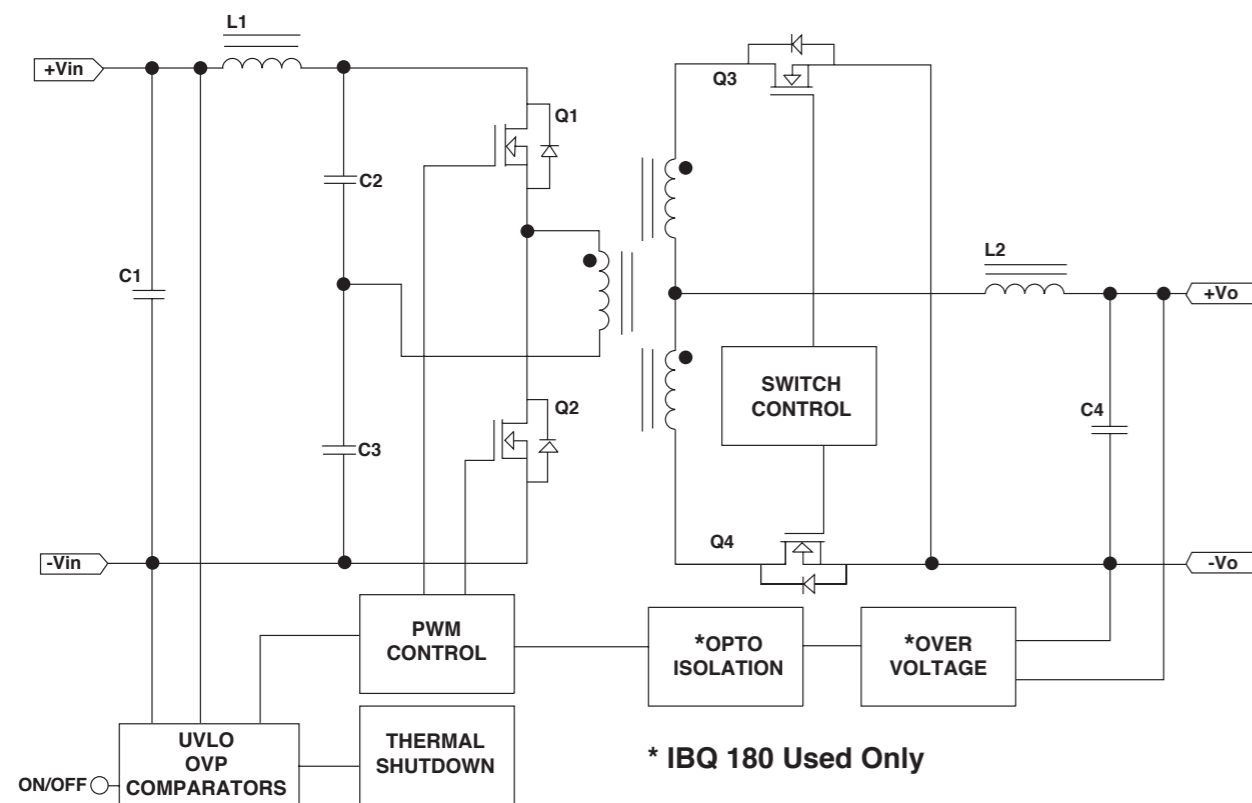


Figure 1. Electrical Block Diagram

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range.....	IBQ300.....	42 - 53V
	IBQ180.....	36 - 75V
Under voltage lockout	42 - 53Vin power up.....	40V typ.
	power down.....	38.5V typ.
	36 - 75Vin power up.....	34V typ.
	power down.....	32.5V typ.
Over Voltage lockout.....	IBQ300.....Turn-off Voltage Threshold.....	57V typ.
	IBQ180.....Turn-off Voltage Threshold.....	79V typ.
Input Filter		Pi Type
Positive Logic Remote on/off Control :		
	Module ON.....	Open Circuit
	Module OFF.....	<0.8VDC

OUTPUT SPECIFICATIONS:

Voltage Accuracy.....	±5.0% max
Transient Response :25% Step Load Change.....	<200u sec.
Ripple and Noise, 20MHz BW ³60mV rms max.
	120mV p-p max.
Temperature Coefficient.....	±0.03%/C max.
Short Circuit Protection.....	Continuous
Line Regulation, Note1.....	IBQ300.....±13.0% max
	IBQ180.....±10.0% max
Load Regulation ²	±5.0% max
Current Limit.....	110%-140% Nominal Output
Over Voltage Protection Trip Range,%Vo nom.....	120%-140%

GENERAL SPECIFICATIONS:

Efficiency.....	See Table
Isolation Voltage.....	2250 VDC min.
Isolation Resistance.....	10 ⁷ Ohms min.
Switching Frequency.....	300KHz typ.
Over Temperature Protection.....	120°C typ.
Power Derating Curve.....	Refer to Application Note
Operating Ambient Temperature Range.....	-40°C to +85°C
Storage Temperature Range.....	-55°C to +125°C
Dimensions.....Standard Model.....	2.28 x 1.45 x 0.40inches
	(57.9 x 36.8 x 10.2 mm)
	Suffix "H" Model.....
	2.28 x 1.45 x 0.50inches
	(57.9 x 36.8 x 12.7 mm)
Weight.....	42g

NOTE:

1. Measured From High Line to Low Line
2. Measured From High Load to No Load
3. The output noise is measured with 10uF tantalum capacitor and 1uF ceramic capacitor across output.
4. Suffix "N" to the Model Number with Alternative Pin Configuration
Model ON..... < 0.8VDC
Module OFF..... Open Circuit
5. Suffix "H" to the Model Number with Heat Sink

Mechanical Specification

Dimensions are in Inches(millimeters)

Tolerances : .XX±.02 in(.X±.5), unless otherwise noted
XXX±.010 in (.XX±.25)

