

Champs-Tech 20F1 BM Flyback DC-DC Module & BaseBoard



- Wide Input Voltage [10-38 Vin]
- Low Profile: 7.0mm Height [Defined by Transformer]
- Output Power Typical 3-20W [Defined by Vin]
- Efficiency 90% Typical 92% Peak over wide Load.
- Quasi-Resonant Flyback Boundary Mode Topology
- Positive Logic On|Off Control option
- Low Output Ripple & Noise
- RoHS & REACH Compliant
- Temperature Range: -40C to +85C
- Output Power capability is optimized by transformer turns ratios. Multiple transformers available with turns ratios 20:1
- Champs-Tech will provide a completed DC-DC module based on this or modified design in any package desired. Contact Us.

20F1 BM Flyback DC-DC Module Catalog



20F1 Series DC-DC Power Module & BaseBoard Isolated Boundary ModeFlyback Converter



Summary Performance Characteristics

Champs PN	Input Voltage	Output Voltage	Output Current	Output Power	Efficiency %	Mode	Dimension (mm)
20F1-0706-15R5	10-36 Vin	12 Vout	1.5 A	18 W	87.4 – 91.4	BCM	26 x 35 x 7.0
20F1-0702-15R5	10-36 Vin	5 Vout	2.5 A	12.5 W	84.6 – 87.2	BCM	26 x 35 x 7.0

Notes:

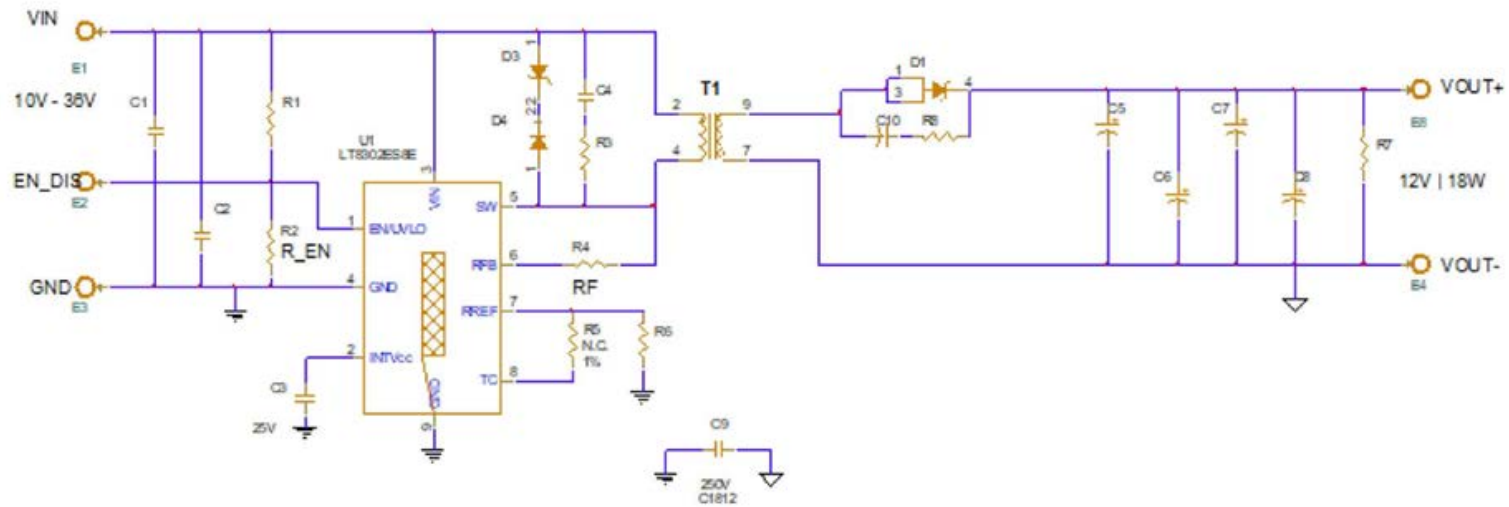
1. Contact factory for additional options and complete ordering part numbers.
2. All specifications are at nominal line voltage and full load, +25 °C. Unless otherwise noted.
3. See detailed specifications below for maximum conditions.
4. Output Power is a function of Input Voltage and transformer turns ratio. Consult Champs-Tech prior to evaluation for any application to ensure proper use.

Description:

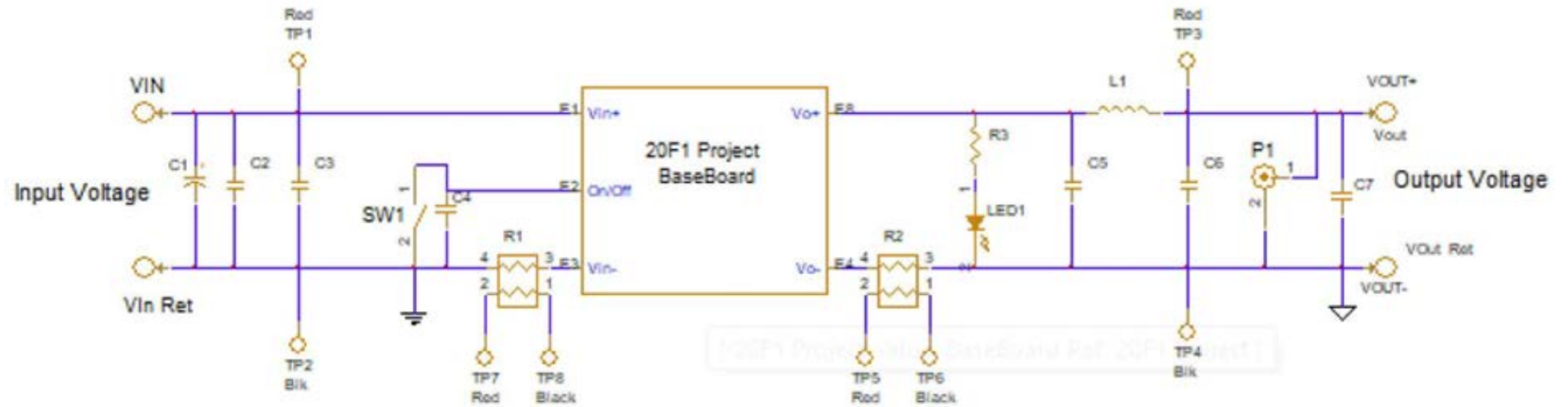
1. Champs-Tech Main Module contains the planar transformer and incorporated power components to complete a high efficiency, robust, low component count and low-cost DC-DC converter. It is intended to be supplied with a companion Base-Board in order to facilitate evaluation. Additional filtering and protection circuit and components may be added.
2. Champs-Tech will build the module for any customer in any mechanical configuration that works best for the customer embedded or discrete open or encapsulated.
3. Champs-Tech will supply the planar transformer.
4. Champs-Tech will configure any possible options
 - Input Voltage Range
 - Output Voltage Single or Multiple.
 - Output Power
 - Discrete planar turns ratios and size.
5. Integer Turns available from 1T to 20T. Can be used as Primary or Secondary. Mechanical configuration and outline allow for a flex arrangement. Contact factory for information on any power topology design.
6. All designs can be supplied with planar windings embedded in the pcb of the Main Module of the converter. Heat Sink and installed power components SM assembly and installation and incorporation into a module are also available.

LT8302 Product Page

<http://www.analog.com/en/products/power-management/switching-regulators/flyback-forward-isolated-controllers/lt8302.html#product-overview>



20F1 12 Volt Schematic - LT8302



BaseBoard Schematic