



## CUSTOM POWER MAGNETICS

mW to kW

A significant portion of Pulse's Power PBU business is derived from developing unique magnetic solutions for our end-customer's applications. In fact, many of our catalog parts began as projects for a specific customer and then were expanded into a broader offering. Often customers are reluctant to engage on a custom design as they anticipate higher costs, NRE charges or longer lead times but in reality most projects leverage existing materials and platforms and therefore lead time, cost and NRE are not affected. Although we do have a wide selection of catalog power magnetics it is still often necessary to create custom or application specific designs due to variations in:

- **Power supply topologies**
- **Input voltage ranges**
- **Operating frequency**
- **Output voltage and power requirements**
- **Mechanical and thermal constraints.**

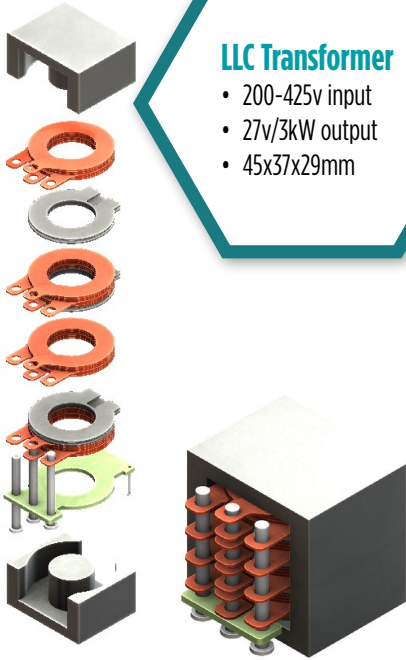
These custom or application specific designs are often simple tweaks to existing catalog solutions and although customers are concerned that 'custom' means higher costs, longer lead times and NRE this is not the case when leveraging existing platforms and material. However, some designs may require completely new designs utilizing custom materials (cores, windings and plastics) and in these cases any NRE, price or lead-time impacts will communicated up front to our customers. By leveraging our material knowledge, design expertise and finite element analysis simulation tools Pulse can quickly evaluate your requirements, determine if a project is feasible and design and manufacture parts that meet your exact requirements.

Please follow the link and fill out the form below and we will review your projects fit within our manufacturing capabilities and business model. We will typically respond to your inquiry within 24 hours.

## High Power Custom Power Transformers

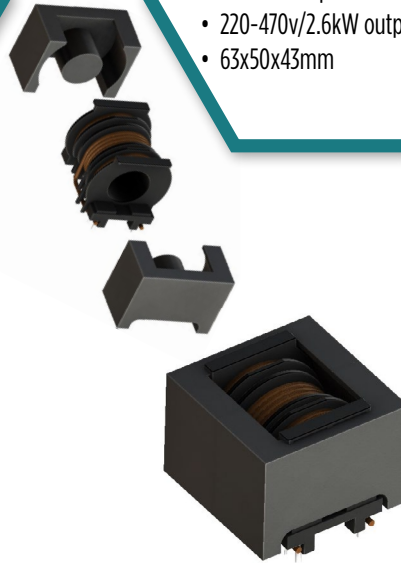
### LLC Transformer

- 200-425v input
- 27v/3kW output
- 45x37x29mm



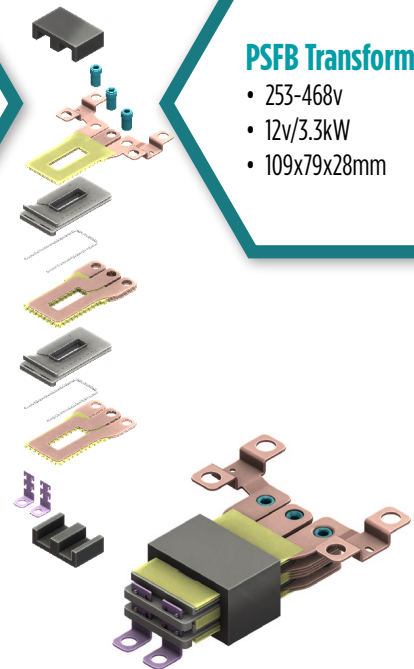
### H-Bridge Transformer

- 340-435v input
- 220-470v/2.6kW output
- 63x50x43mm



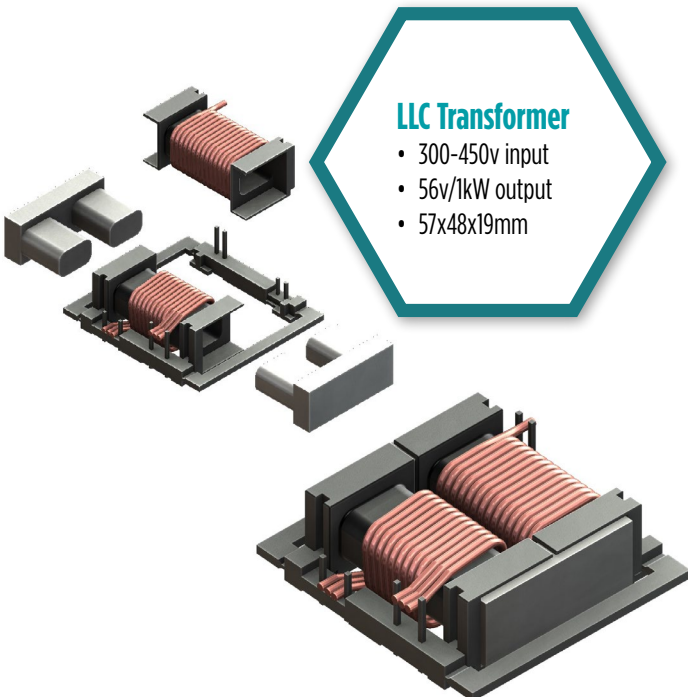
### PSFB Transformer

- 253-468v
- 12v/3.3kW
- 109x79x28mm



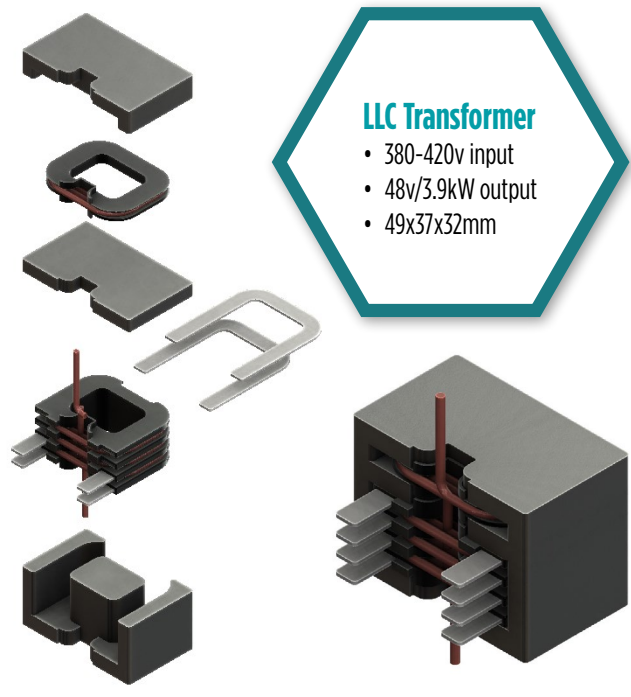
### LLC Transformer

- 300-450v input
- 56v/1kW output
- 57x48x19mm



### LLC Transformer

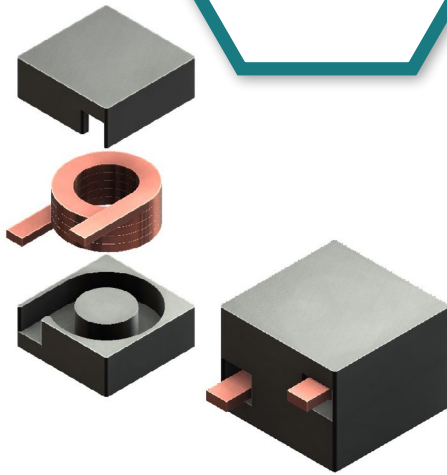
- 380-420v input
- 48v/3.9kW output
- 49x37x32mm



## High Current Custom Inductors and CM Chokes

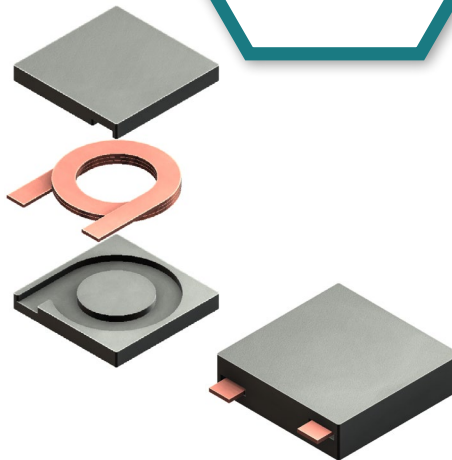
### Output Inductor

- 3.9uH, 68Apk
- 3.9kW DC/DC
- 22x16x22mm



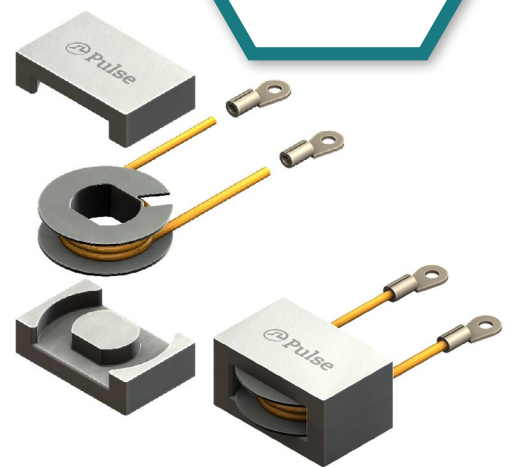
### Output Inductor

- 3.9uH, 68Apk
- 3.9kW DC/DC
- 31x8x31mm



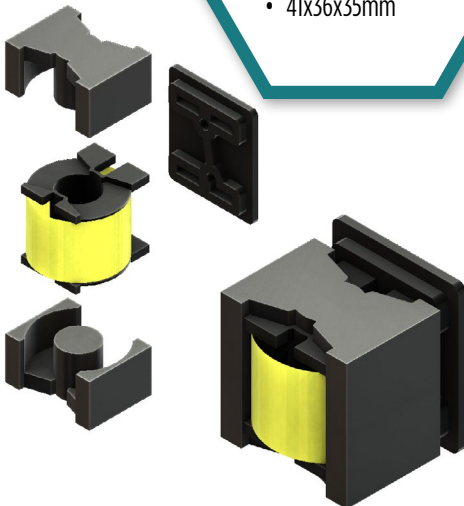
### Resonant Inductor

- 14uH, 30Apk
- 53x44x26mm



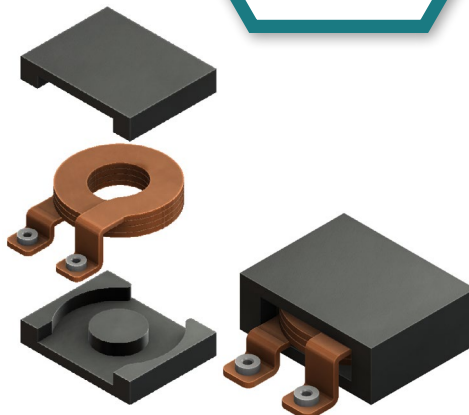
### Resonant Choke

- 11kH
- 2uH, 40A
- 41x36x35mm



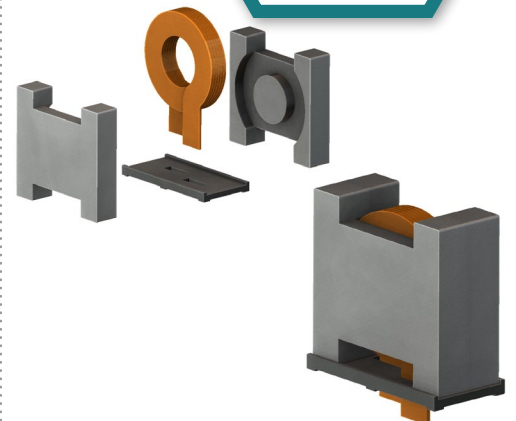
### Output Inductor

- 1.8uH
- 340A
- 71x64x26mm



### Output Inductor

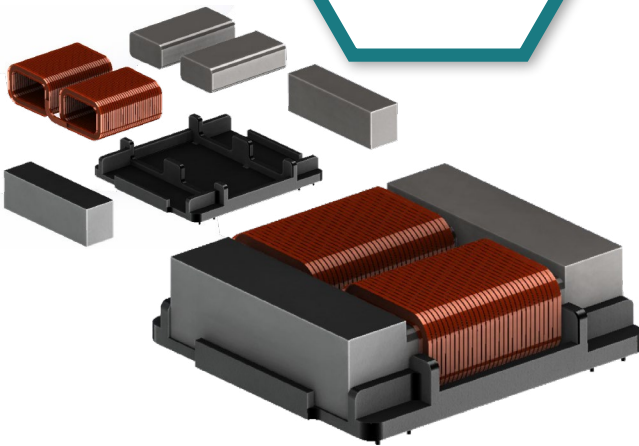
- 1uH, 150Apk
- 46x23x46mm



## High Current Custom Inductors and CM Chokes (cont.)

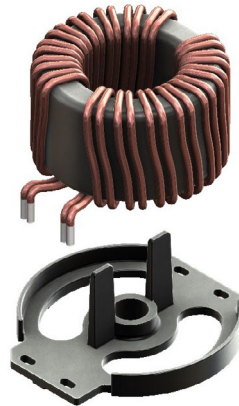
### PFC Inductor

- 300uH, 20Apk
- 2kW DC/DC
- 67x61x19mm



### CM Choke

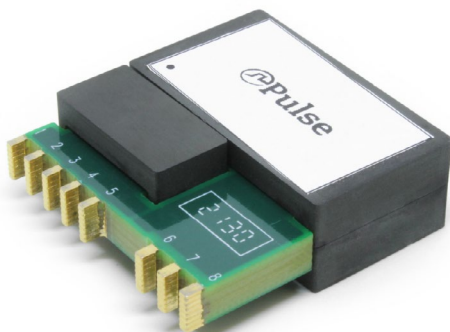
- 1.4mH, 36A
- 11kW
- 57x54x36mm



## Integrated Custom Power Magnetic Assemblies

### Integrated LLC

- 400v input
- 20v/330W output
- 36x36x13mm



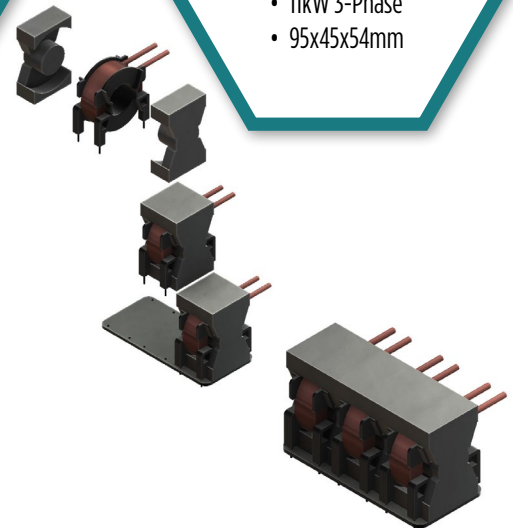
### LLC Xfrm & Resonant Ind

- 400v input
- 200-400v output
- 3.5kW
- 82x58x38mm



### PFC Choke

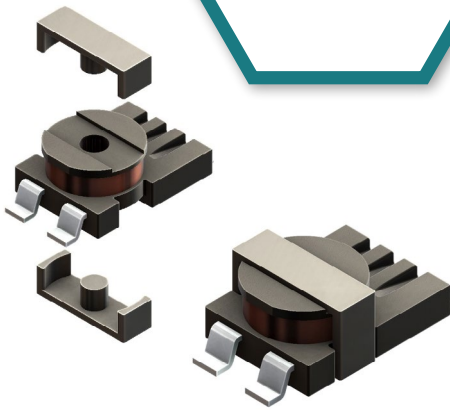
- 95uH/30Apk
- 11kW 3-Phase
- 95x45x54mm



## Small Form Factor Custom Solutions

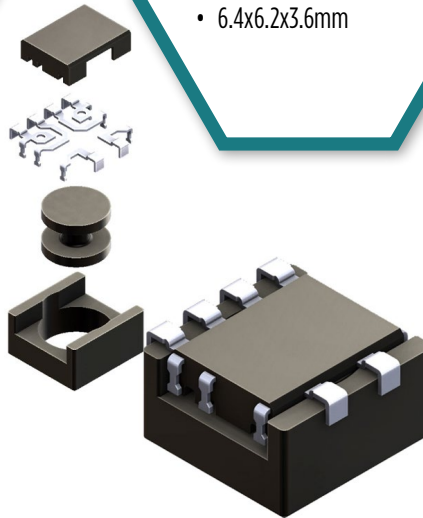
### Current Sense Magnetic

- 50A, 5000Vrms
- 21x13x7mm



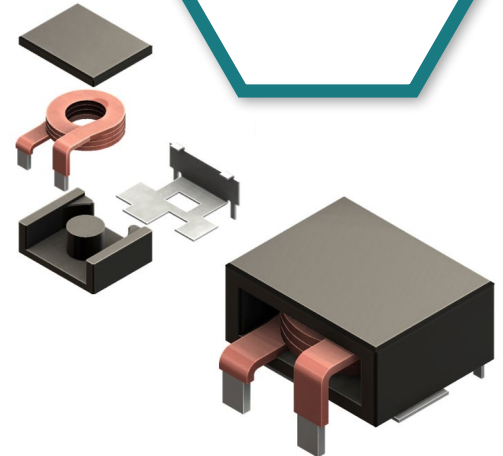
### Flyback Transformer

- 2W
- 6.4x6.2x3.6mm



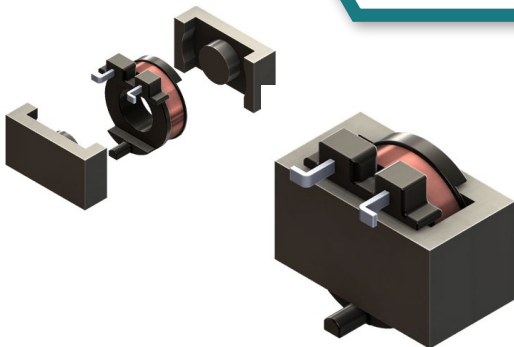
### Straddle Inductor

- 0.8, 22Apk
- 11.4x11.3x6.8mm



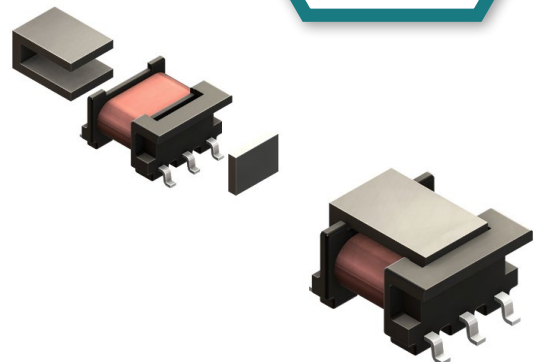
### Straddle Inductor

- 1uH, 20A
- 11.2x9.8x7.4mm



### Isolation Transformer

- 2500Vrms, Functional Insulation
- Small Form Factor
- 9.5x8.1x5.1mm

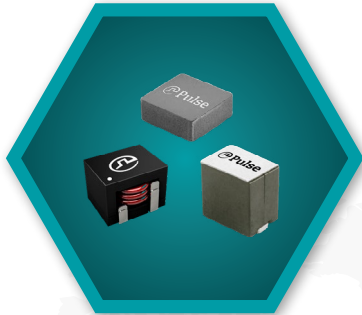


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mW to kW

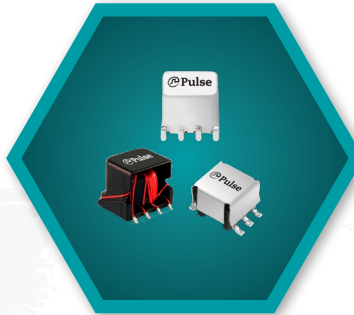
## Our Products

from mW to kW,  
we will help make your next great product a reality



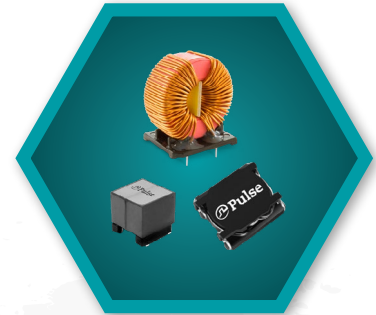
### Power Inductors

- Power Bead, Molded, Composite, Drum Core and Toroid Constructions
- Over 100Apk



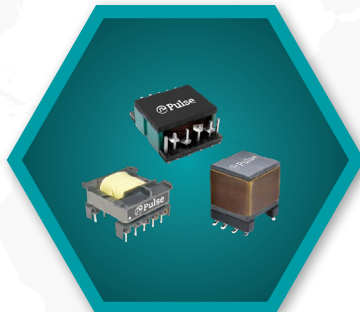
### Isolation Transformers

- Push-pull, Flyback and H-Bridge topologies
- Functional, Basic and Reinforced Insulation
- Up to 5kVrms Hi-pot\*



### Common Mode Chokes

- NiZn, MnZn and Nanocrystalline Materials
- Up to 45Arms



### Switch Mode Transformers

- Multiple Topologies
- Up to 2kW
- Functional, Basic and Reinforced Insulation



### Current Sense Magnetics

- Functional, Basic and Reinforced Insulation
- Up to 40Arms

## Our Markets

from small consumer devices to large utility installations,  
power magnetics are everywhere



**Communications**



**Computing**



**Transportation**



**Industrial**