

Product Brief

HybridPACK™ 1 DC6 Wave

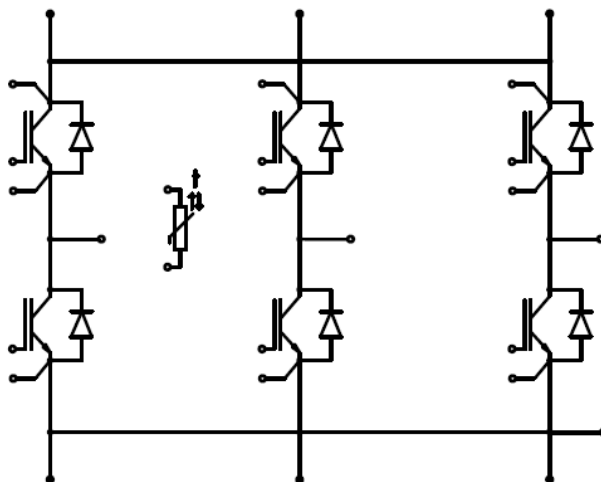
FS400R07A3E3_H6

The HybridPACK™ 1 DC6 Wave is a very compact power module optimized for hybrid and electric vehicle main inverter applications (xEV). The module is based on established solder and screw interconnections known from HybridPACK™ 1. Improved stray inductance and blocking voltage offer lowest conduction and switching losses especially at inverter maximum ratings.

The HybridPACK™ power module family is optimized for hybrid and electric vehicles. The modules are based on Infineon's long-term experience developing IGBT power modules and Trench-Field-Stop IGBTs including matching diodes with enhanced softness. Intense research efforts of new material combinations and assembly technologies enable leading thermal and electrical performance at highest reliability and mechanical robustness.

The DC6 Wave has a baseplate with ribbon bonds for an optimized direct water cooling and thus optimized current density. A product derivate with a flat baseplate FS400R07A3E3 enables cost savings in case lower inverter performances are suitable.

Block Diagram



Key features

- > 705V Trench-Field-Stop IGBT with matching emitter controlled diodes
- > 50% lower Stray inductance (HP1)
- > $T_{j,max} = 175^{\circ}\text{C}$ for peak power (<10s)
- > Ribbon-bond baseplate for direct cooling

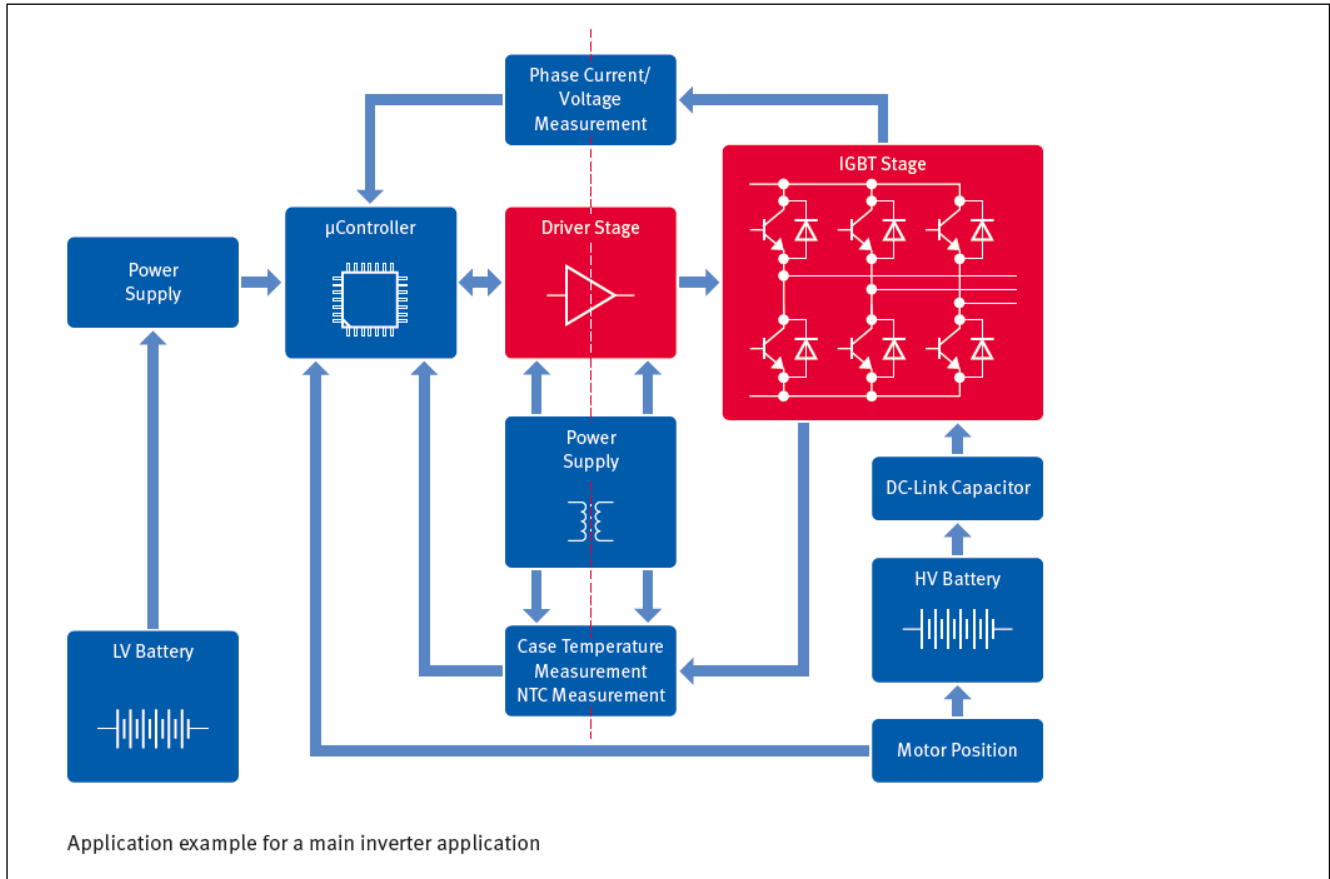
Key benefits

- > Very compact and cost efficient inverter designs
- > Reuse of existing package technology
- > Flat baseplate module derivate for optimized cost at lower inverter performance

HybridPACK™ 1 DC6 Wave

FS400R07A3E3_H6

Application Diagram



Product Table

Type	Description	Ordering Code	Product Status
FS400R07A3E3_H6	HybridPACK™1 DC6 Wave	SP001632430	In Production
FS400R07A3E3	HybridPACK™1 DC6	SP001279744	In Production

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