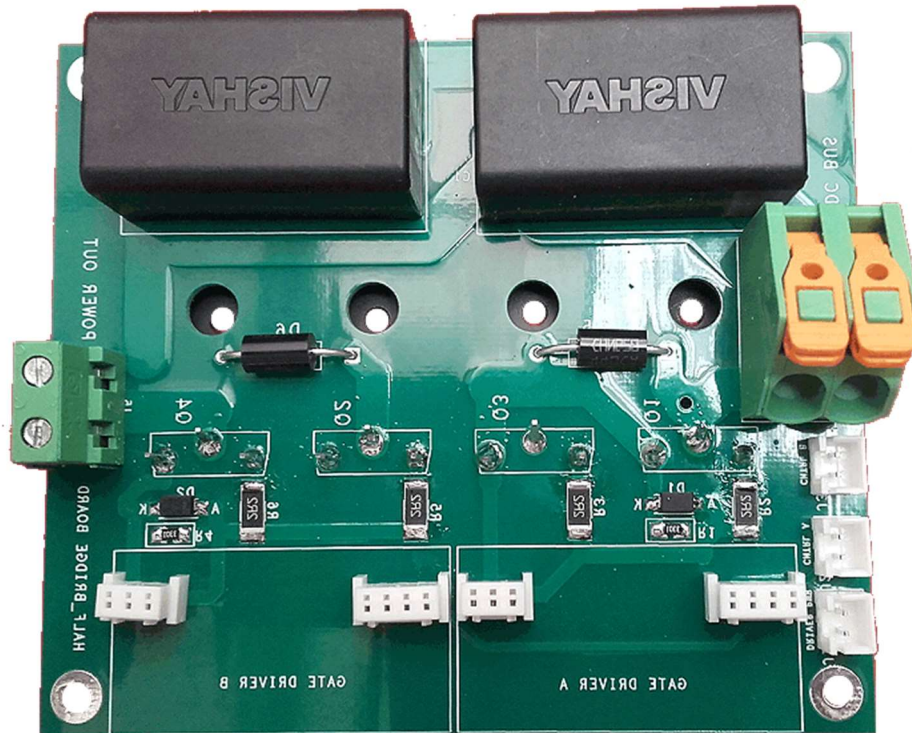


HALF BRIDGE INVERTER FOR INDUCTION HEATING

Le-HB2



- **Fast Isolated Gate Drivers**
- **High quality Snubber Capacitors**
- **Compatibility with IGBTs, MOSFETs, and SiC Mosfets**
- **2x2 Parallel transistors for higher current**
- **Supply voltage up to 700V.**
- **Average current allowed by PCB tracks up to 40A.**

The module is a compact version of a half-bridge inverter with very low parasitic inductance, which allows it to be used in a large number of applications. It has all the necessary elements for the implementation of professional converters: High quality Snubbers Network, drivers on the board itself, two transistors in parallel per switch, TVS protection diodes, etc.

All types of Mosfets and IGBTs can be used on the plate with TO-247 and TO-264 type caps arranged in a comfortable way, to be screwed to a heat sink.

Two of them can form a bridge H capable of generating a power greater than 20 kW if it is fed with 600V DC from a three-phase rectifier of six pulses, or more than 8 kilowatts if we feed it from a full-wave rectifier of the single-phase network of 230V.

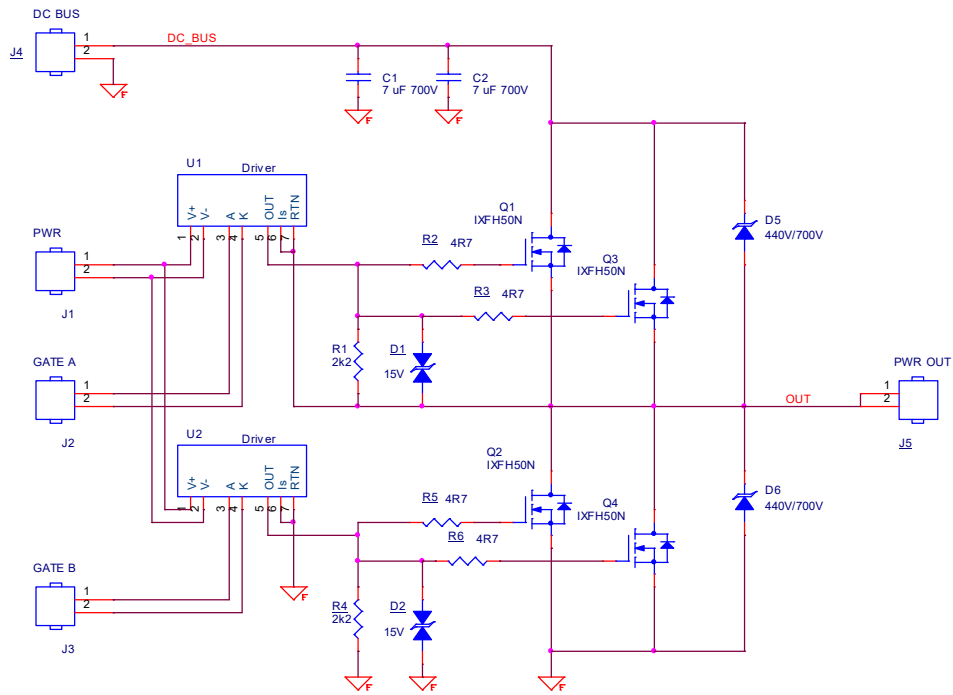
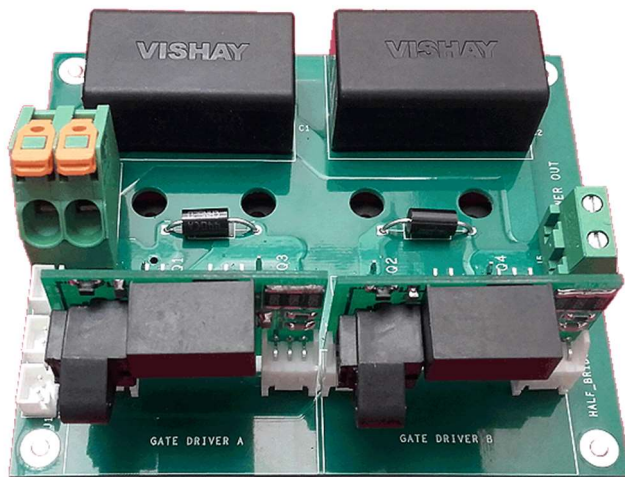


Fig.1. Module schematics.

All used capacitors have very low ESR and LSR value, for their effective operation at high frequency.

The module is compatible with Ledoelectronics' new generation of gate drivers.



Successfully tested in a 4 KW induction furnace at 950 kHz, with Sic MOSFETs (silicon carbide transistors).