# HITACHI introduces the next High Power Density Dual - $_n$HPD$^2$

$_n$HPD$^2$ offering 75% lowered internal stray inductance and providing easier DC-connectivity enables not only withdrawing full benefit of wide-bandgap devices but also further refining of existing state of art the Silicon devices.

## *Features of $_n$HPD$^2$*

***"Low inductance"*** is realized by dual configuration. The 10nH of 450A-3.3kV offers 75% reduction versus latest Hitachi F version technology. A potential reduction of total inductance by 70% by the collaborative activity with busbar system and capacitors optimization.

***"High Power Density"***, offering a further 10% improvement in performance using advanced Hitachi F version chip technology - Advanced Trench HiGT[*1)] - already offering the market 20% more power in conventional packages since its 2014 launch. SiC technology will be applied on this package as well.

***"Scalable",*** large currents can easily be handled by paralleling. The design offering component standardisation throughout the industrial voltage classes (1700-6500V).

***"Temperature sensor"*** made available for system side monitoring and greater reliability under harsh overload conditions.

*1) HiGT : High Conductivity IGBT

| Package | VCES | IC |
|---|---|---|
| LV | 1,700 V | 900 A |
| LV / HV | 3,300 V | 450 A |
| HV | 4,500 V | 330 A |
| HV | 6,500 V | 225 A |

Product images of LV & HV packages

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