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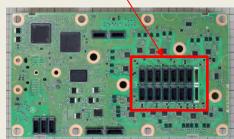
TOYOTA PRIUS ZVW51 MOTOR INVERTER POWER CARD ANALYSIS REPORT

March 2017. LTEC corporation released an analysis report of the Toyota Prius ZVW51 motor inverter power card. This innovative new system features a "two in one" package configuration with high-side and low-side power elements using a two-sided heat dissipation structure. Note that the previous generation had a 'one in one' package configuration and a single-side heat dissipation structure. The socket is soldered to the board, but the power card is inserted into the socket without soldering. This is to prevent solder cracks caused by vibration during driving. The new power card design reduces the space required for mounting it by 33%.



Prius ZVW51
Front Invertor unit

Power card socket



Main control board



Power card

Up to seven power cards can be inserted into the socket. Three types of power cards are used for the motor drive for the purpose of power generation and boosting. Different IGBT devices are used depending on the intended purpose. This fifty-one page report includes an analysis of the inverter board socket, X-ray, cross-section, plan view images captured after removal of the heat sink and resin, and images of the mounted IGBT devices.

Priced to sell at \$2,000

Note:

The listed report price may not be accurate as it decreases over time. Please contact us for current report pricing info@ltecusa.com

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