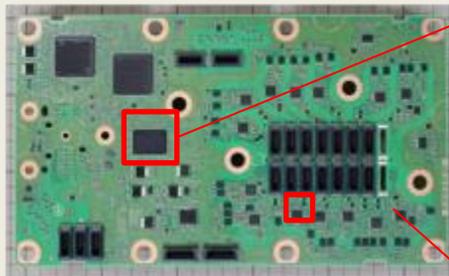


TOYOTA PRIUS ZVW51 ASICs “ON THE MOTOR” INVERTER BOARD FUNCTION ESTIMATION REPORT

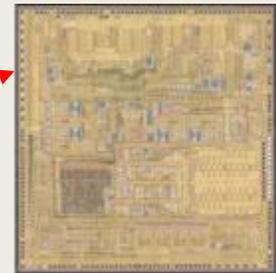
March 2017. LTEC corporation released ASIC function estimation analysis reports of Toyota Prius ZVW51 motor inverter main control board. There are three ASICs on the board. MCU by Renesas (n=1), ASIC by Denso (n=1) and a Gate driver ASIC by Denso (n=14) that drives the power devices.



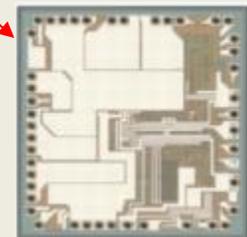
Prius ZVW51 front inverter unit



Control board



ASIC (1)



ASIC (2)/Gate driver

This report is focused on the analysis of the two ASICs. Since the datasheet cannot be obtained, LTEC identified the pin functions based on the analysis of the main PCB circuit and by partial analysis of the ASIC layout.

Two content options are available:

ASIC (1): QFP-128, 3 metals - 1 poly SOI process and 20 pages report

ASIC(2): QFP-36, 4 metals - 1 poly BiCMOS process and 15 pages report

ASIC (1): \$5,880 Report ID: 16G-0015-1

ASIC (2) gate driver: \$5,480 Report ID: 16G-0016-1

Note:

The listed report price may not be accurate as it decreases over time.

Please contact us for current report pricing info@ltecusa.com

16G-0015-1

Table of Contents

[ASIC\(1\): 16H-0015-1](#)

	Page
1. Device summary	3
2. Package	4
3. Die overview	6
4. Pin function identification	11
5. Function block identification	19

Table of Contents

[ASIC\(2\)/Gate Driver : 16H-0016-1](#)

	Page
1. Device summary	3
2. Package	4
3. Die overview	6
4. Pin function identification	12
5. Function block identification	14

16G-0015-1

