

車載関連機器のノイズ低減&費用削減向けに新商品 64Mbを追加

New 64Mb products reduce noise and costs in automotive applications

NEW

ROHM GROUP
LAPIS
SEMICONDUCTOR

出力ドライバビリティ調整機能*付きSDRAM

SDRAM with Integrated Output Drivability Adjustment Function*

*LAPIS Semiconductor's Original Function

MD56V62161R Series

Features

- 出力ドライバビリティ調整機能が出力波形品質向上とEMIノイズ低減を実現
ラピスセミコンダクタのSDRAMは全商品に本機能搭載
Output drivability adjustment function improves output waveform quality and reduces EMI noise
(All LAPIS Semiconductor's SDRAM products have this function)

- 波形品質向上によりダンピング抵抗を削減し、トータル製造コストを削減
部品代及び実装費用、更に面積縮小によるプリント基板費用も削減可能
Improved waveform quality reduces total production costs along with the number of damping resistors
(Makes it possible to decrease component and mounting costs, as well as PCB costs by reducing mounting area)

- 車載品質対応・AEC-Q100 グレード2対応・
Ta=-40℃~+105℃対応
Automotive grade, AEC-Q100 Grade 2 qualified ;
Ta= -40°C to +105°C

Applications

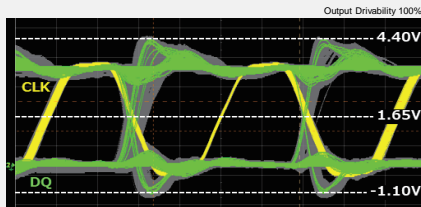
- クラスター、カーオーディオ、カーナビなどの車載関連機器
Automotive applications, including instrument clusters and car audio / navigation
- 通信機器、業務用プリンタなどの産業機器
Communication and industrial equipment such as industrial printers

出力波形品質向上

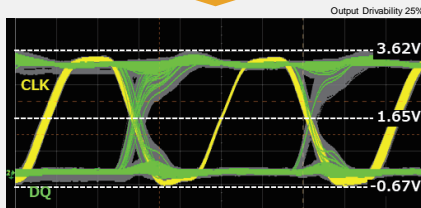
Optimized Output Waveforms

オーバーシュート、アンダーシュート改善
Improved overshoot and undershoot

• Output Waveform Measurement



Improved waveforms

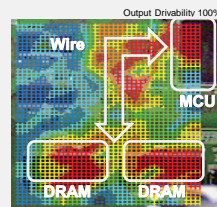


EMIノイズ低減

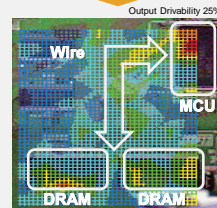
Reduced EMI Noise

強ノイズ領域縮小
Reduced High EMI noise

• PCB Electromagnetic Field Analysis



Reduced EMI noise



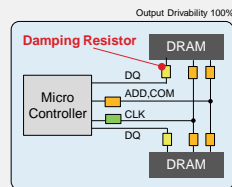
Measured at GPS bandwidth (f=1.575GHz)

製造コスト削減

Reduced Production Costs

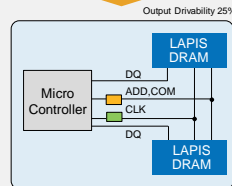
ダンピング抵抗削減
Reduced the damping resistors

• PCB Circuit Diagram



Conventional DRAM

Reduced resistors



LAPIS Semiconductor DRAM

• PCB: Printed Circuit Board