

产品概况

Deren的M.2连接器符合PCI Express M.2 规范. 支持Gen3/Gen4/Gen5,最高支持32GT/s传输速率。Gen3和Gen4产品的GND端子是独立的，Gen5产品的GND端子短接在一起以获得更好的高频性能。M.2产品家族可以支持多种不同的功能应用。不同功能应用的连接器以不同的塑胶KEY来区分。目前最流行的KEY位是用于Wi-Fi应用的E key和用于SSD应用的M key。可选的连接器高度有1.65H/2.0H/3.2H/3.5H/4.0H/4.8H/5.5H/5.8H/6.4H/6.7H/8.5H。

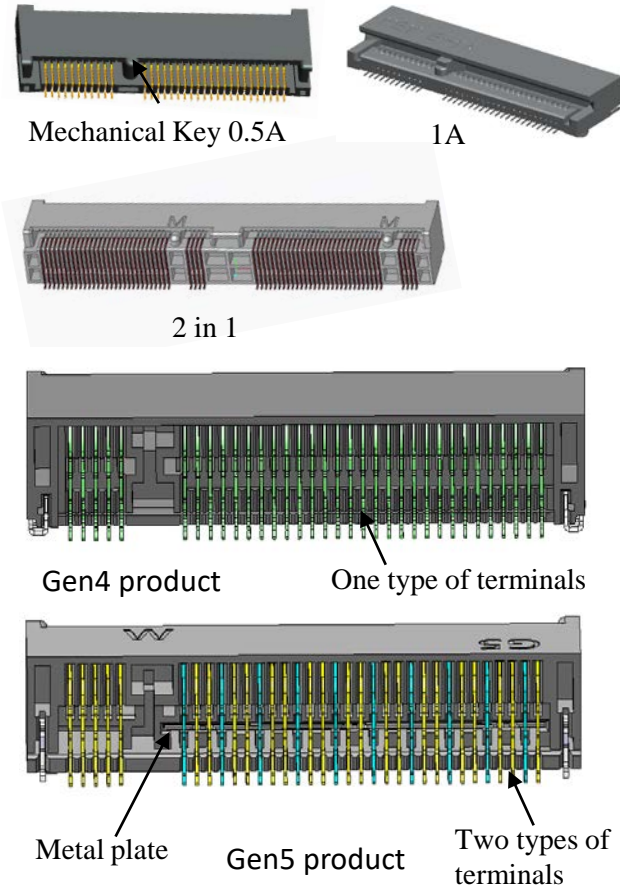
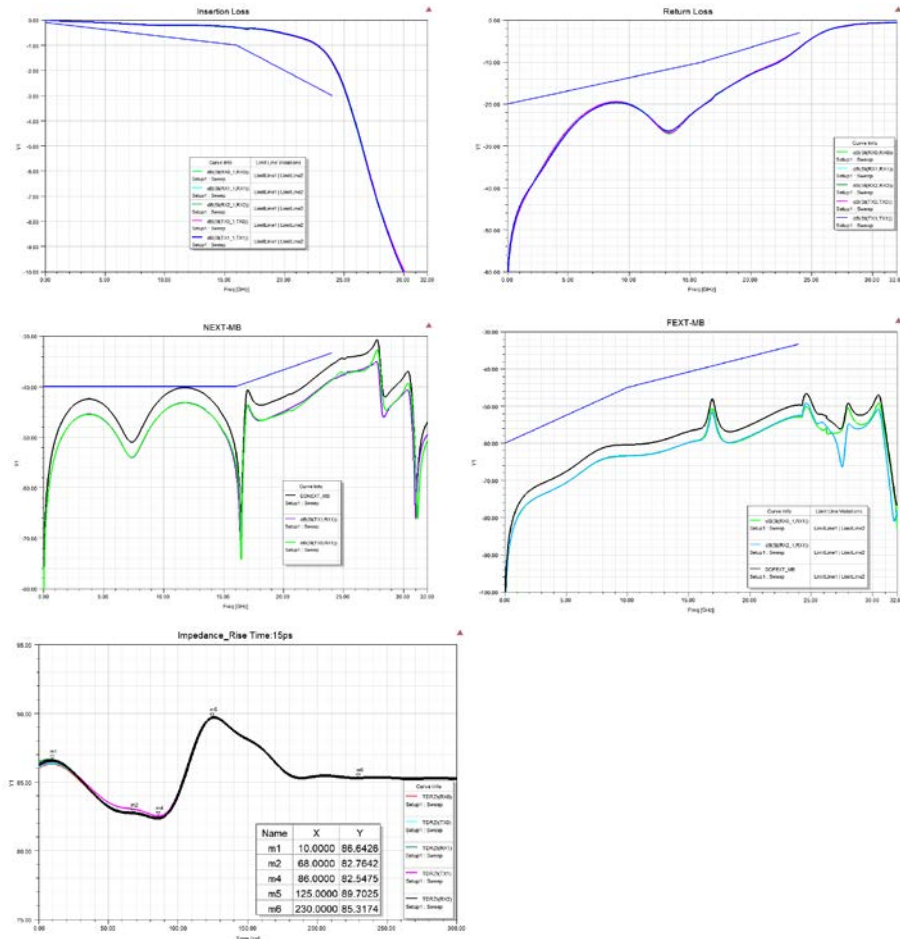
产品应用

- 笔记本电脑
- 超级本
- 平板电脑

技术信息

- 有Gen3,Gen4,Gen5规格
- 特性阻抗85Ω
- 20 插拔角度(1.65H/2.0H 水平插拔)
- 多种高度可选(1.65H/2.0H/3.2H/4.0H/4.8H/5.5H/6.4H/8.5H)
- 多个高度相同的footprint(expect 1.65H/8.5H)
- 衍生1A规格
- 定制2in1规格

高频信号完整性



机械性能

- 插入力(模块到连接器): 20N max
- 端子保持力: 100gf min.
- 耐久性: 25cycles.

电气性能

- 低阶接触电阻: 55mΩ initial, Δ20mΩ
- 绝缘电阻: 100MΩ min.
- 耐电压: 300VAC.
- 额定电流: 0.5A/pin 和 1A/pin 两种

环境性能

- 易燃性: UL 94 V-0
- 低卤素: 最大1000ppm Cl, 最大1000ppm Br
- 符合RoHS指令2011/65/EU
- 工作温度: -55°C~+85°C

产品规范

- PCI Express M.2 SPEC:
- DEREN SPEC: DR-PS-0024/DR-PS-0134 (Gen5)

GENERAL PROFILE

Deren M.2 Connectors meet PCI Express M.2 specification. Support diverse generations of connectors with data rate transfer up to 32GT/s. The GND pins are discrete for Gen3 and Gen4. And for Gen5, the GND pins are joined together to improve the SI performance. The M.2 family of form factors is intended to support multiple function Adapter. There will be a unique mechanical key for specified function adapter. Currently, the most popular keys are E key (for Wi-Fi application) and M key (for SSD application). The product heights are optional: 1.65H/2.0H/3.2H/3.5H/4.0H/4.8H/5.5H/5.8H/6.4H/6.7H/8.5H.

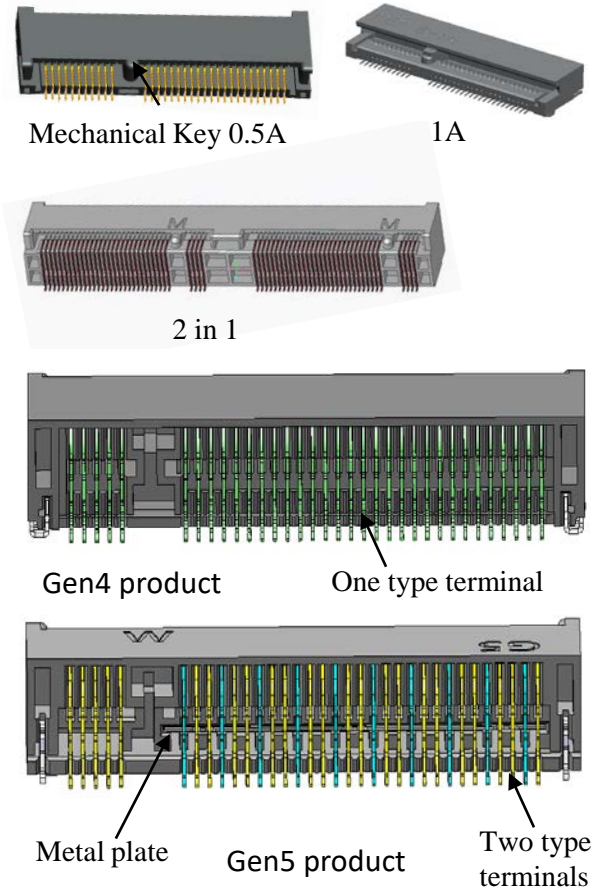
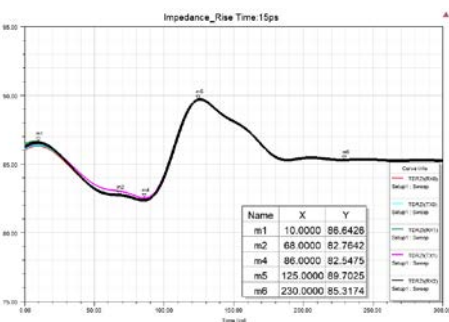
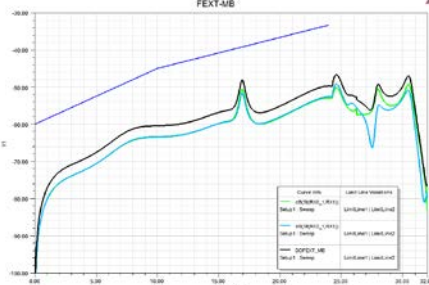
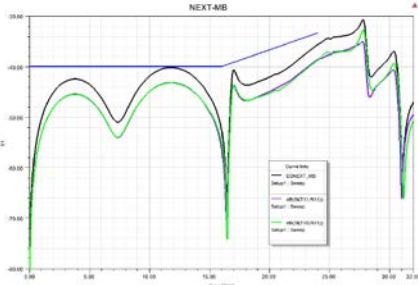
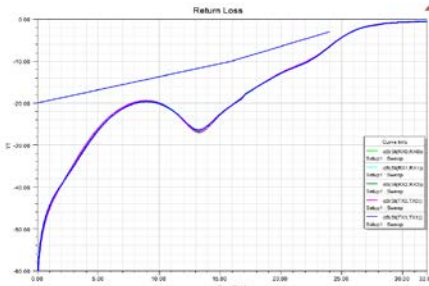
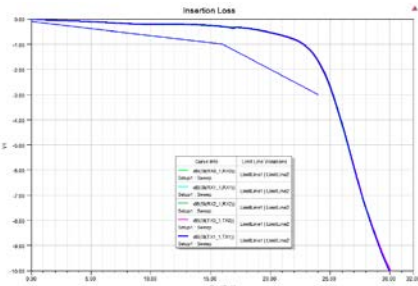
TARGET MARKET

- Note book
- Ultra book
- Tablet platform

TECHNICAL INFORMATION

- Optional Gen3, Gen4, Gen5 connector
- Reference differential impedance: 85Ω
- 20 degree angle module insertion & extraction (1.65H/2.0H horizontal insertion)
- Optional connector height (1.65H/2.0H/3.2H/4.0H/4.8H/5.5H/6.4H/8.5H)
- Share a common footprint (except for 1.65H/8.5H)
- Extend 1A spec connector
- Customized 2in1 spec.

SI PERFORMANCE



MECHANICAL PERFORMANCE

- Insertion force (module to connector): 20N max
- Terminal retention force: 100gf min.
- Durability: 25cycles.

ELECTRICAL PERFORMANCE

- Low level contact resistance: 55mΩ initial, Δ20mΩ
- Insulation resistance: 100MΩ min.
- Dielectric withstanding voltage: 300VAC.
- Current rating: 0.5A/pin and 1A/pin two types

ENVIRONMENTAL

- Flammability: UL 94 V-0
- Low halogen: 1000ppm max. Cl, 1000ppm max Br.
- Compliant with RoHS directive 2011/65/EU
- Operating Temperature: -55° C to + 85° C

SPECIFICATION

- PCI Express M.2 SPEC:
- DEREN PRODUCT SPEC: DR-PS-0024