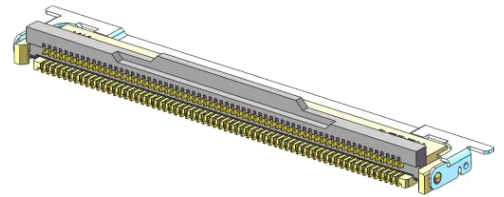


GENERAL PROFILE

FFC/FPC solution is widely used in desktop, mobile, server and network communication equipment. Because of the high insertion loss issue, the PCB traces can't carry the high speed signal too far. As the signal speed of thin and high performance notebook is getting faster and faster, the PCB long trace transfer solutions cannot meet the SI performance any more. DEREN shielded FFC connection solution can solve the issue very well. The shielded FFC has very low insertion loss and good cross talk performance, which can be used for the boards connection between CPU and GPU.

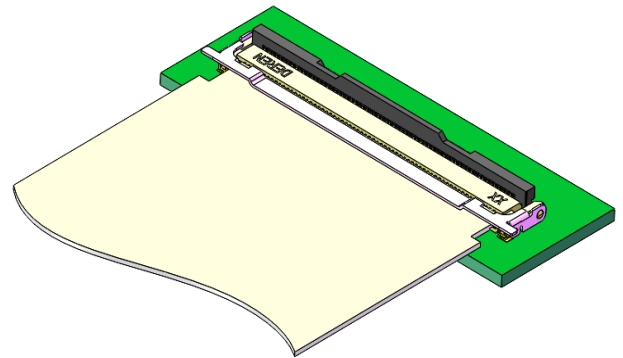


TARGET MARKET

- Notebook
- AOI
- Server

TECHNICAL INFORMATION

- Pitch 0.4mm, Height 1.52mm, Ultra-thin SMT connector saves panel space.
- Dual-terminal structure design to provide stable EMI & SI performance.
- 0.3 mm thickness FFC cable, flexibility, fit for customized bending and folding
- Pin count can go up to 80 pins, Support custom pin definition;
- Differential impedance: 85 Ohm, Capable USB4, TBT-4 and PCIE Gen5 speed;
- Single-pin current transmission up to 1.5A Max



MECHANICAL PERFORMANCE

- FFC/FPC Insertion force :30gf/PIN Max
- FFC/FPC retention force:30gf/PIN Min initial
- Durability: 20 cycles

ELECTRICAL PERFORMANCE

- Low level contact resistance: 20mΩ initial
- Insulation resistance : 500MΩ min.
- Dielectric withstanding voltage : 500V AC/DC.
- Current rating :0.2A/PIN

ENVIRONMENTAL

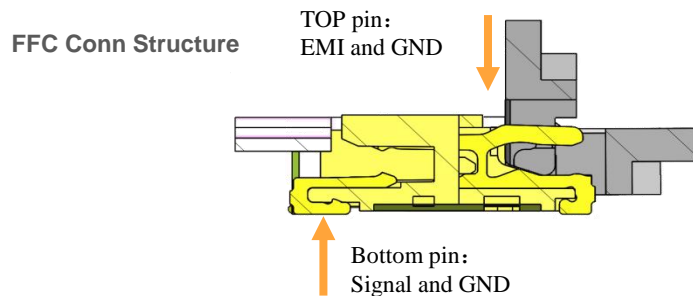
- Flammability: UL 94 V-0
- Low halogen: 1000ppm max. Cl, 1000ppm max Br.
- Compliant with RoHS directive 2011/65/EU
- Operating Temperature: -20° C to + 85° C

SPECIFICATION

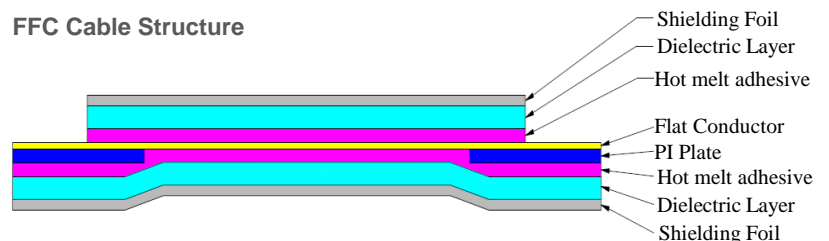
- DEREN PRODUCT SPEC : DR-PS-0135

PART NUMBER DESCRIPTION

Part No.	Pin	Length	Width	Height	Pitch
561HBC-001H	50PIN	26.34mm	5.0mm	1.52mm	0.4mm
561YBC-001H	64PIN	31.94mm	5.0mm	1.52mm	0.4mm
5624BC-001H	70PIN	34.34mm	5.0mm	1.52mm	0.4mm



FFC Cable Structure



产品概况

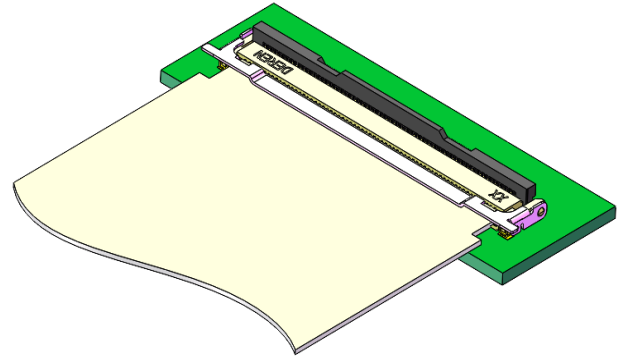
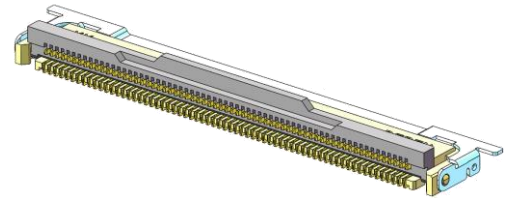
FFC/FPC解决方案广泛应用于桌面、移动、服务器以及网络通信设备。因为高损耗的问题，PCB走线很难远距离传输高速信号。由于轻薄高性能笔记本信号传输速度越来越快，PCB信号长走线传输的方案已经不再能满足信号完整性的要求。得润屏蔽FFC连接方案可以很好的解决这个问题。屏蔽FFC线有着非常低的插入损耗和良好的串扰性能，可以用作CPU和GPU板间的连接。

产品应用

- 笔记本电脑
- 桌面一体机
- 服务器

技术信息

- Pin间距0.4mm&高1.5mm,高密度超薄SMT型连接器，节省面板空间;
- 双端子结构设计，提供稳定的接地屏蔽和信号传输效果;
- 0.3 mm厚FFC电缆，灵活，适合定制弯曲和折叠;
- 引脚数可达80个引脚，支持自定义引脚传输定义;
- 85Ω特性阻抗、适用USB4.0/TBT4/PCIE 5.0高速传输;
- 单pin电流传输高达1.5A Max;



机械性能

- FFC/FPC插入力:30gf/PIN Max
- FFC/FPC保持力:30gf/PIN Min initial
- 耐久周期: 20 cycles

产品规格

料号	引脚数	长度	宽度	高度	间距
561HBC-001H	50PIN	26.34mm	5.0mm	1.52mm	0.4mm
561YBC-001H	64PIN	31.94mm	5.0mm	1.52mm	0.4mm
5624BC-001H	70PIN	34.34mm	5.0mm	1.52mm	0.4mm

电气性能

- 低电平接触电阻:20mΩ initial
- 绝缘电阻:500MΩ min.
- 介电耐压:500V AC/DC.
- 额定电流:0.2A/PIN

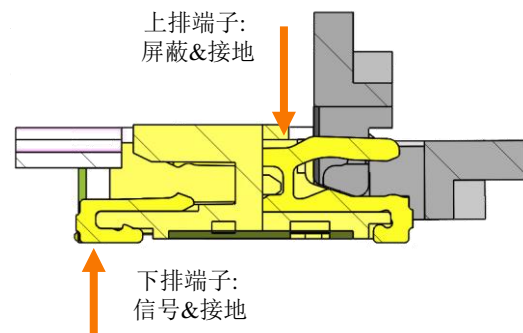
环境性能

- 易燃性:UL 94 V-0
- 低卤素:最大1000ppm; Cl, 1000ppm最大Br
- 符合RoHS指令2011/65/EU
- 工作温度:-20°C~+85°C

产品规范

- 得润产品规范: DR-PS-0135

FFC Conn 结构



FFC 线材结构

