

### 产品概况

目前CPU常用的接口方式分别为接触式与引脚式。按产品类型可分为LGA、PGA和BGA。LGA 1700是英特尔最新台式机电脑CPU插座连接器，也称为Socket V0，用于酷睿12和13代CPU产品，由得润与英特尔合作开发。得润是目前中国大陆唯一能够独立研发，测试及量产LGA 1700的企业。

得润LGA 1700 CPU插座连接器具有良好的可焊接性、安全可靠、更加耐用的特点。

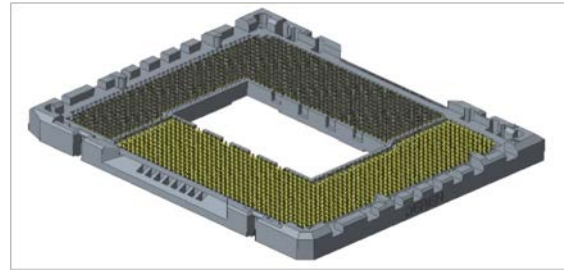
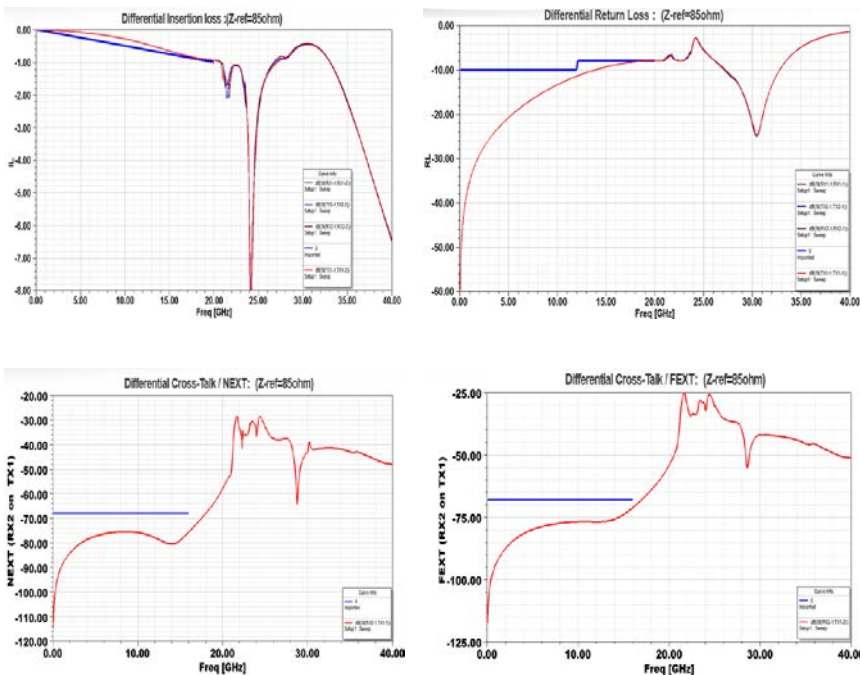
### 产品应用

- 适用于Intel 12代酷睿处理器
- 适用于Intel 13代酷睿处理器

### 技术信息

- 在芯片底部制作了阵列电极接触封装，可以在较小的封装中容纳更多的输入和输出引脚。
- 总触点数为LGA 1700，正交0.80mm。
- 采用热植球工艺，可大大降低假焊不良率，优化芯片空间布局，加强芯片信号传输的稳定性。
- 该产品定义了表面安装(地网阵列)插座。

### 高频信号完整性



LGA 1700 脚座



LGA 1700 装配体

### 机械性能

- 静态预载压缩: 166.6N-416.5N
- 每次接触的静态压缩: 10gf-25gf
- 耐久性: 30次

### 电气性能

- 低电平接触电阻:  $\leq 27\text{m}\Omega$
- 绝缘电阻: 800 M Ohms
- 介电耐压: 360Volts RMS
- 额定电流: 0.5A/引脚

### 环境性能

- 易燃性: UL 94 V-0
- 低卤素: 最大900ppm.Cl, 900ppm最大Br
- 符合RoHS指令2011/65/EU
- 工作温度:  $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$

### 产品规范

- 规范: 符合英特尔设计准则1.0
- 得润产品规范: DR-PS-0128

### GENERAL PROFILE

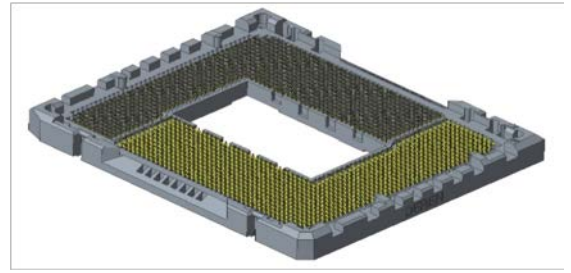
At present, the commonly used interface modes of CPU are contact type and pin type. By product type can be divided into LGA, PGA and BGA. The LGA 1700 is Intel's newest desktop CPU Socket connector, also known as Socket V0, for Core 12 and 13 generation CPU products, developed by DEREN in collaboration with Intel. At present, DEREN is the only enterprise in mainland China that can independently develop, test and mass produce LGA 1700.

### TARGET MARKET

- Intel 12 generation Core processors
- Intel 13 generation Core processors

### TECHNICAL INFORMATION

- An array electrode contact package is made on the bottom of the chip, which can accommodate more input and output pins in a smaller package.
- Total number of contacts for 1700, 0.80mm orthogonal.
- Adopt hot Ball-Attach Process, can greatly reduce the false welding defect rate, optimize the chip space layout and strengthen the stability of the chip signal transmission.
- This product defines surface mount (Land Grid Array) socket.

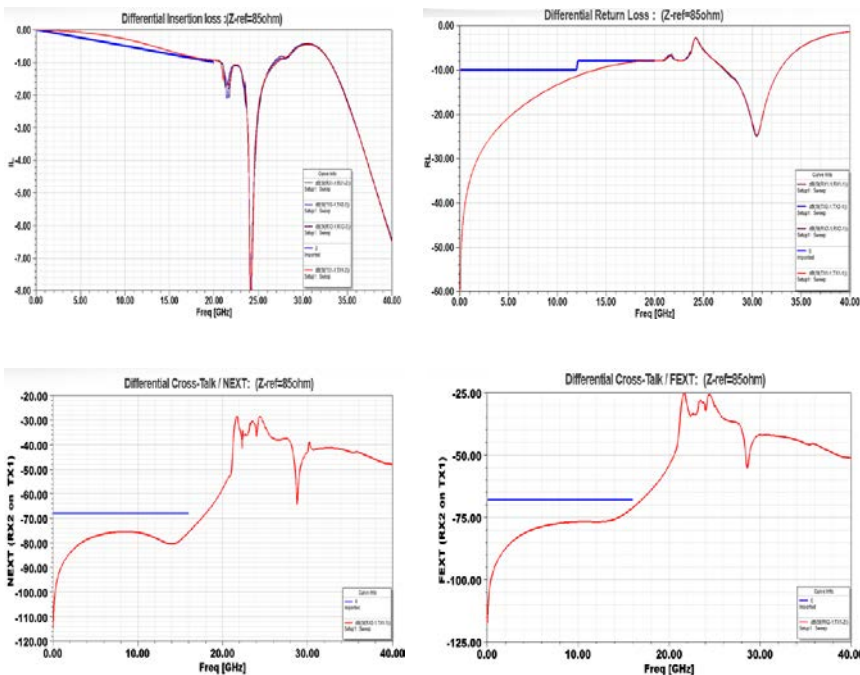


LGA 1700 Socket



LGA 1700 Assembly

### SI PERFORMANCE



### MECHANICAL PERFORMANCE

- Static Pre-Load Compressive: 166.6N-416.5N.
- Static Compressive per Contact: 10gf-25gf.
- Durability: 30times.

### ELECTRICAL PERFORMANCE

- Average Low level contact resistance :  $\leq 27\text{m}\Omega$  .
- Insulation resistance: 800 M Ohms.
- Dielectric withstanding voltage: 360 Volts RMS .
- Current rating: 0.5A/pin De-rate.

### ENVIRONMENTAL

- Flammability: UL 94 V-0.
- Low halogen: 900ppm max. Cl, 900ppm max Br.
- Compliant with RoHS directive 2011/65/EU.
- Operating Temperature:  $-40^{\circ}\text{C}$  to  $+100^{\circ}\text{C}$  .

### SPECIFICATION

- SPEC: Intel Design guidelines 1.0.
- DEREN PRODUCT SPEC: DR-PS-0128.