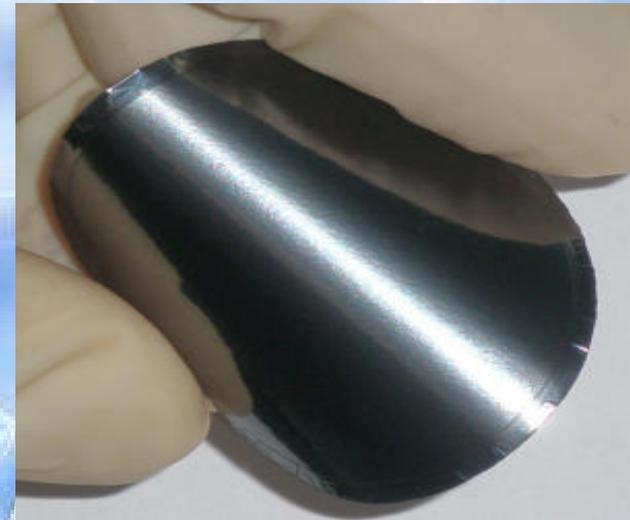


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GTS 散热膜



GTS heat spreader



B&C Engineered Solutions

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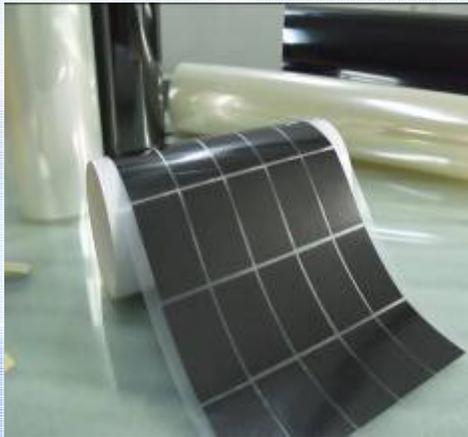
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B&C Thermal Management Solutions

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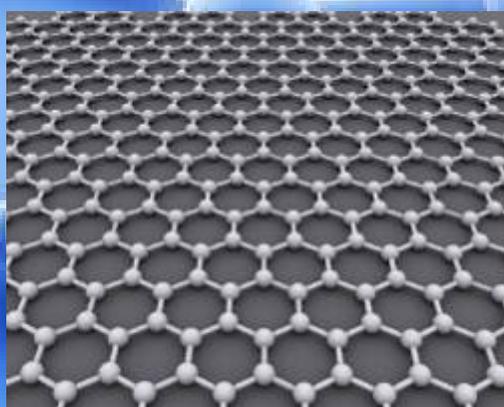
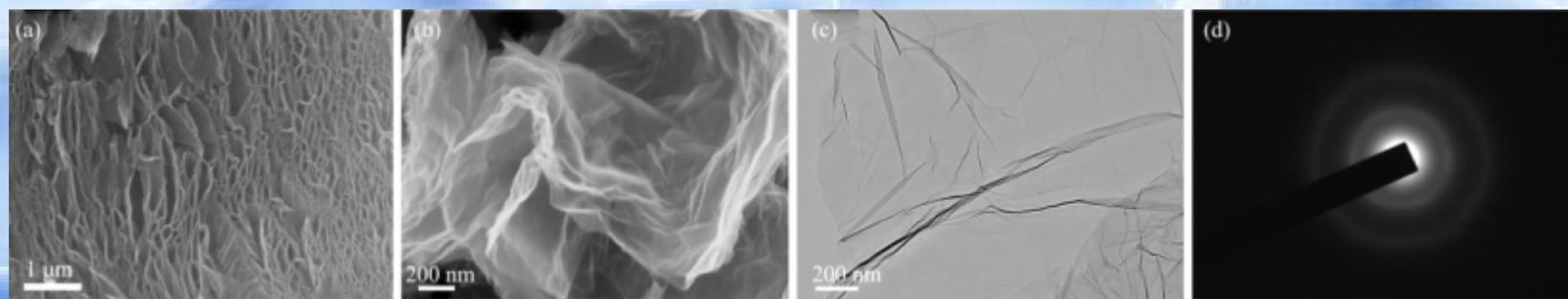


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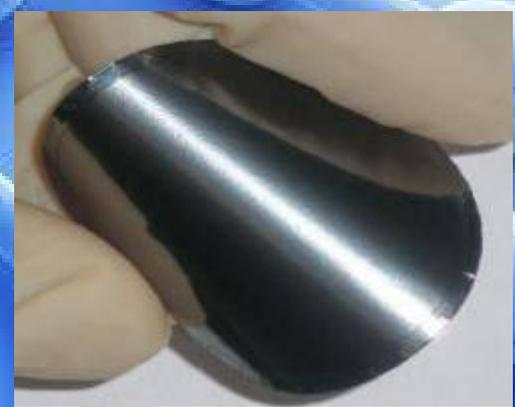
Graphene 石墨烯



石墨烯原子结构



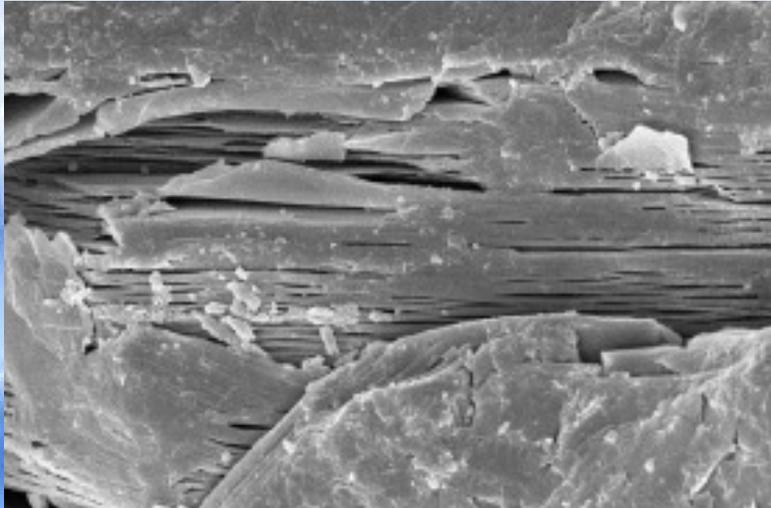
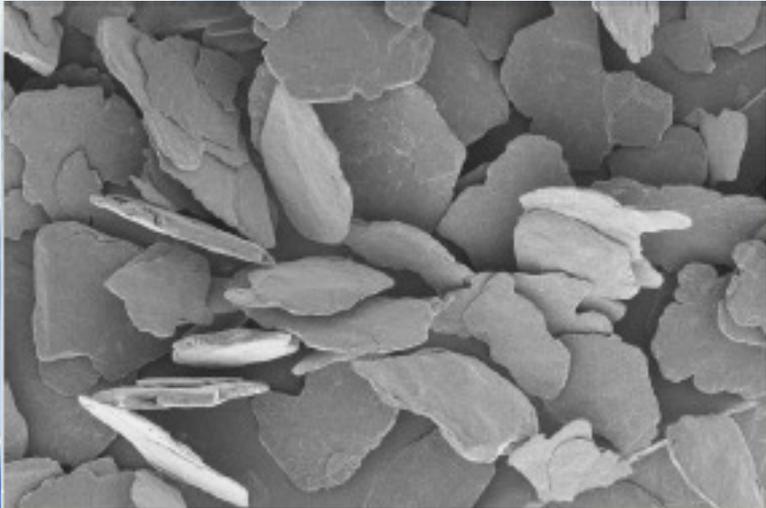
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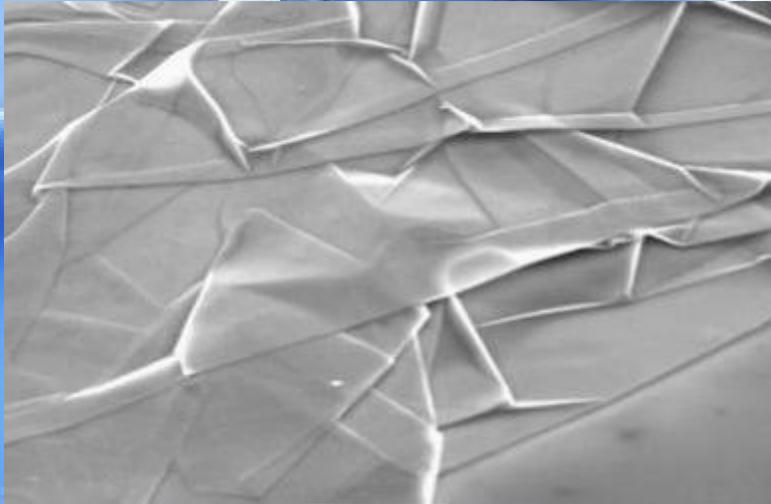
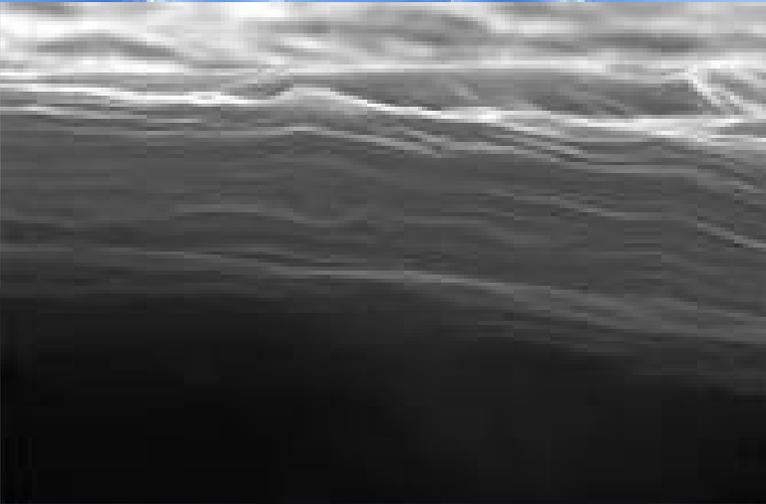
石墨烯散热膜

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天然石墨微观结构

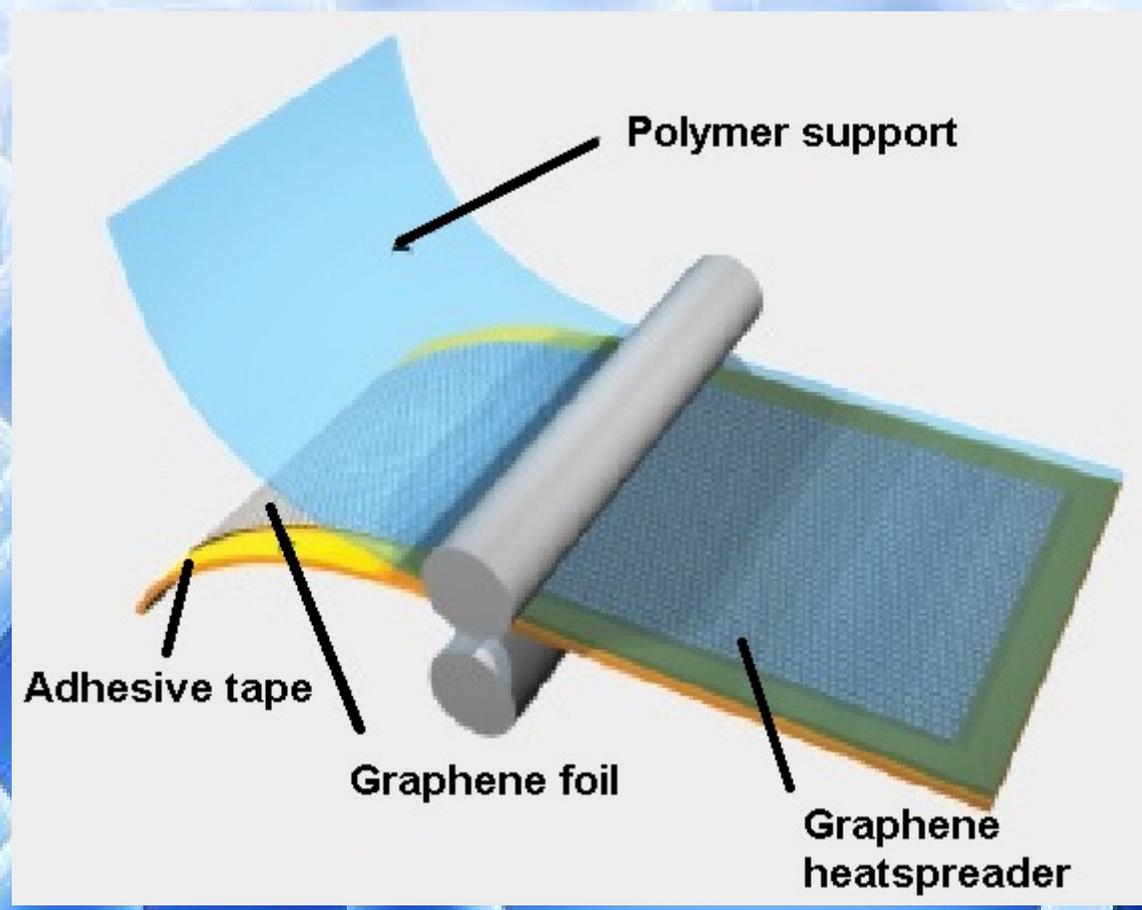


石墨烯微观结构



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散热膜结构图



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GTS石墨烯散热解决方案

-----提升移动设备综合性能

GTS石墨烯散热膜

- 降低显示装置热点温度
- 控制接触温度
- 防止电池过热延长电池寿命
- 减低元件温度提高设备可靠性



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手持设备接触温度设计极限

塑料

65°C

玻璃

55°C

金属

45°C



B&C Thermal Management Solutions

手持设备温度改善



最高温度

温度梯度

50°C

20°C

43°C

15°C

智能手机LCD背面贴GTS-05石墨烯散热膜前后对比

B&C Thermal Management Solutions

GTS散热膜显示装置热管理应用

GTS散热膜

- 提高屏幕亮度均匀性
- 降低表面温度
- 促进显示装置均匀散热
- 降低屏幕机械应力



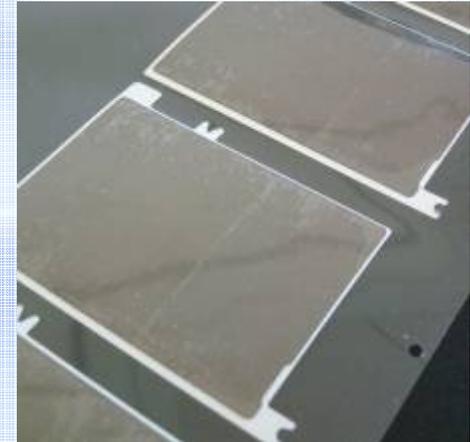
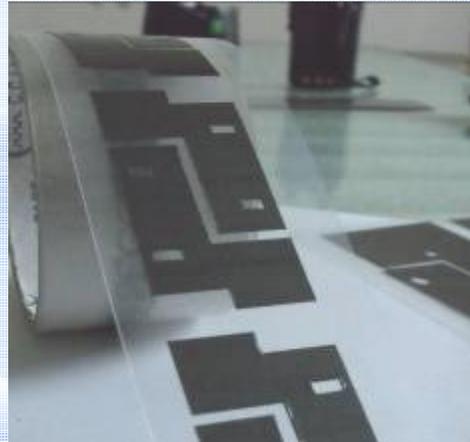
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B&C散热膜

B&C GTS heat spreader Difference

GTS散热膜

- 高热传导率
- 冷却热源
- 消除热点
- 低密度，重量轻
- 柔韧性强
- 具有环境友好性



B&C Thermal Management Solutions

B&C散热膜

B&C GTS heat spreader Difference

GTS散热膜超越金属传热率

铜传导率380W/mk

铝传热率200W/mk

GTS散热膜 300W~1200W/mk

完整结构的石墨烯膜最高导热可以达到3000W/mk

金刚石膜	1300~2400W/mk
热解石墨膜	700~1600W/mk
天然石墨膜	100~600W/mk
银	429W/mk
铜	380W/mk
铝	200W/mk
导热绝缘片	1~3.5W/mk
导热硅胶	0.8~17 W/mk

B&C Thermal Management Solutions

B&C散热膜

B&C GTS heat spreader Difference

GTS散热膜优点

高导热率

低密度

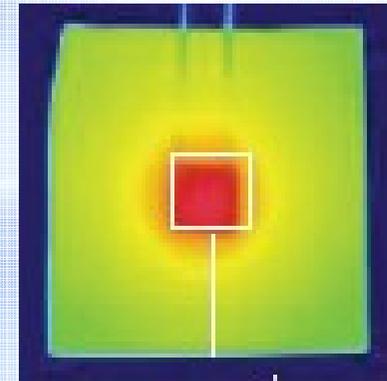
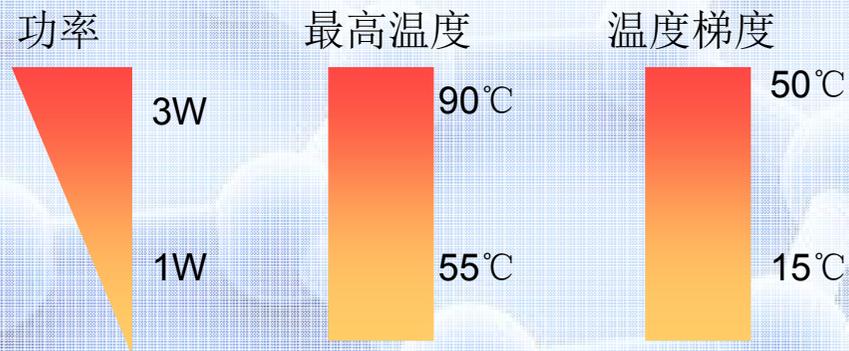
支持超薄化设计



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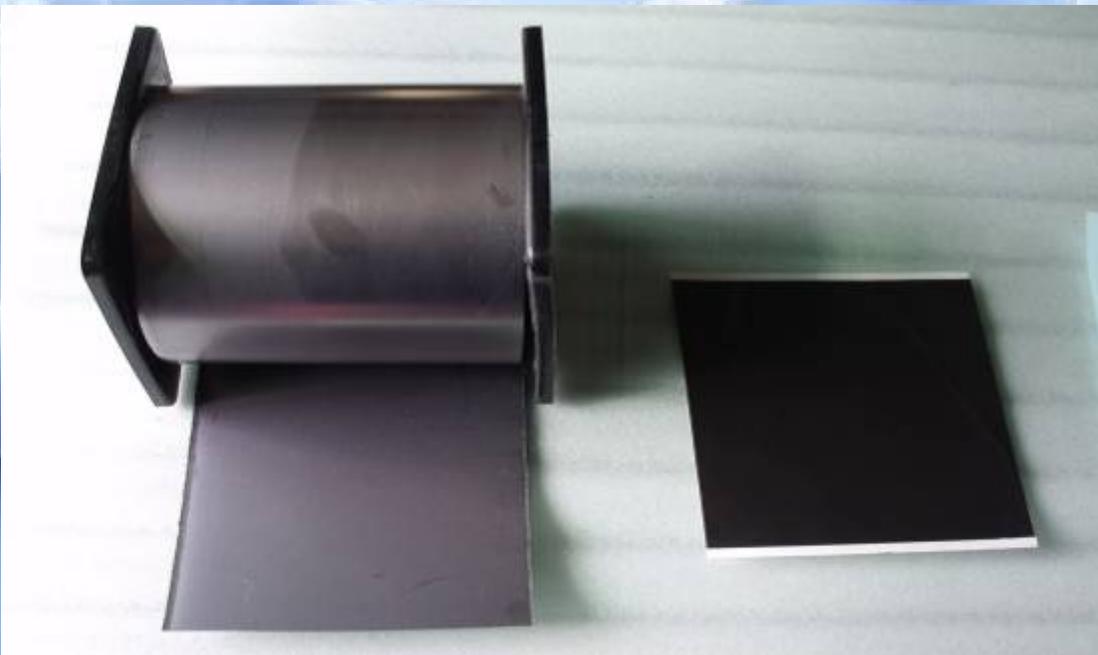
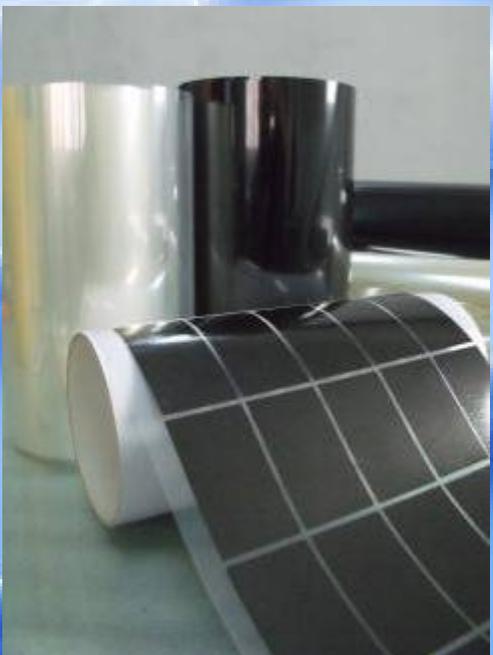
B&C石墨烯散热膜热扩散性 B&C GTS Graphene heat spreader Difference

GTS石墨烯散热膜热扩散试验



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石墨烯散热膜 Graphene Heatspreader



石墨烯厚度: 10um, 30um, 50um, 75um, 100um, 130um, 200um , 250um, 500um, 1000um, 1500um(except laminate film)

石墨烯散热膜厚度: 0.03mm~1.5mm

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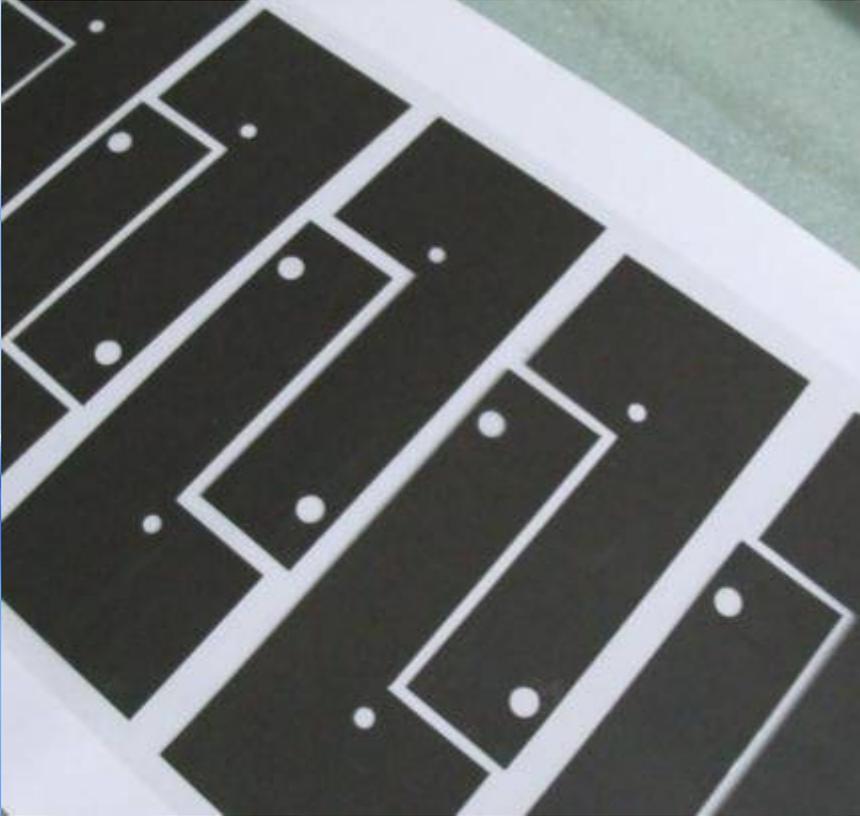
Graphene heatspreader



移动电源散热

B&C Thermal Management Solutions

Graphene heatspreader



手机PCB散热

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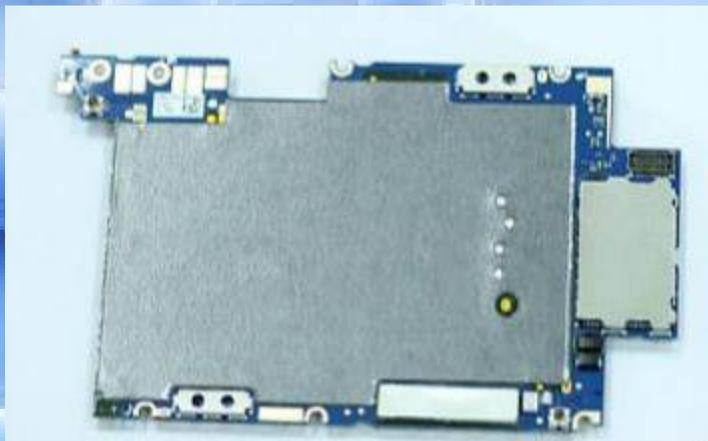
Graphene heatspreader



手机中框散热

B&C Thermal Management Solutions

Graphite heatspreader

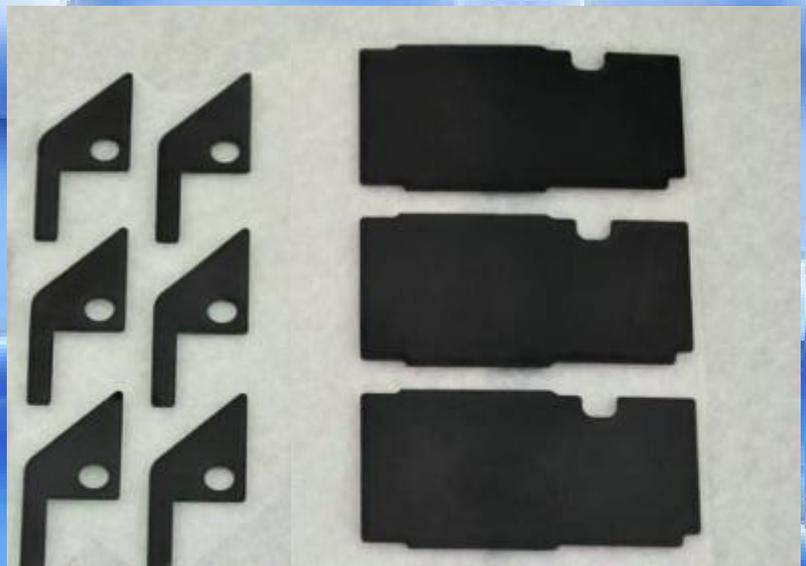


手机PCB散热

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手机应用

Graphite heatspreader



手机PCB散热

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MID平板应用



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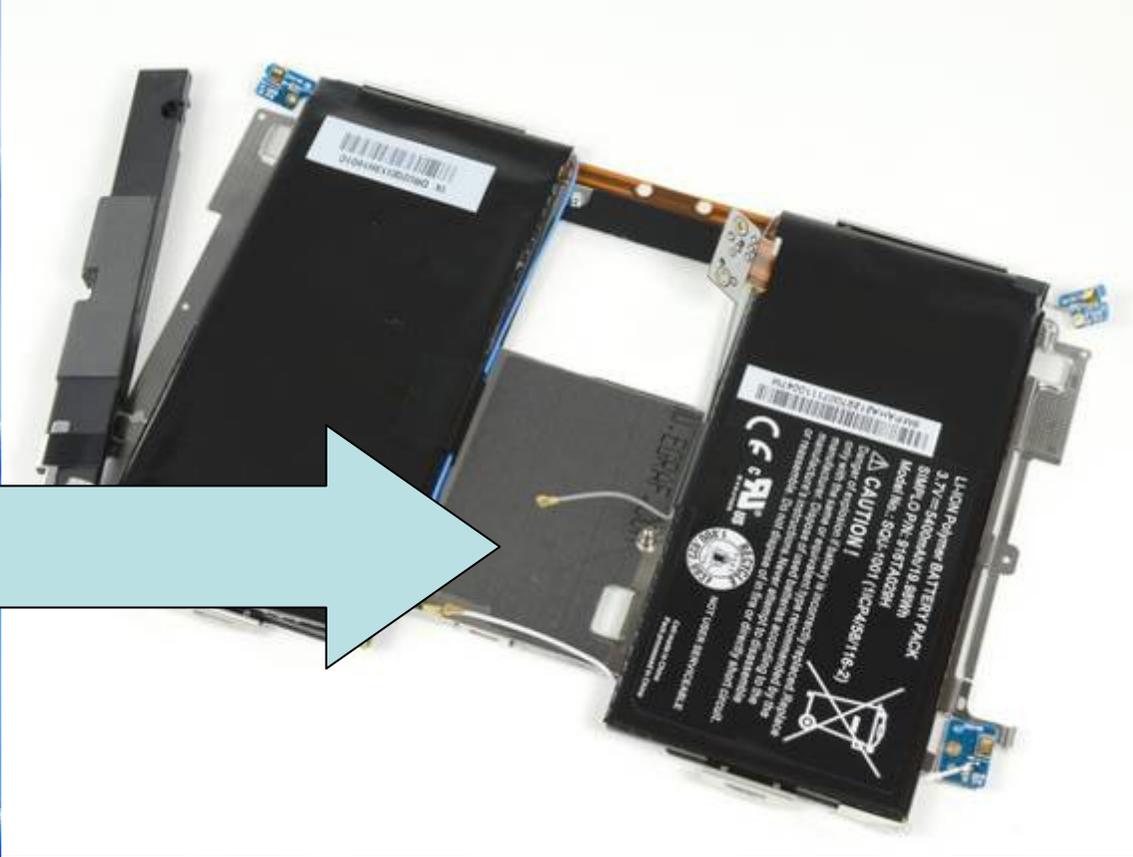
MID应用



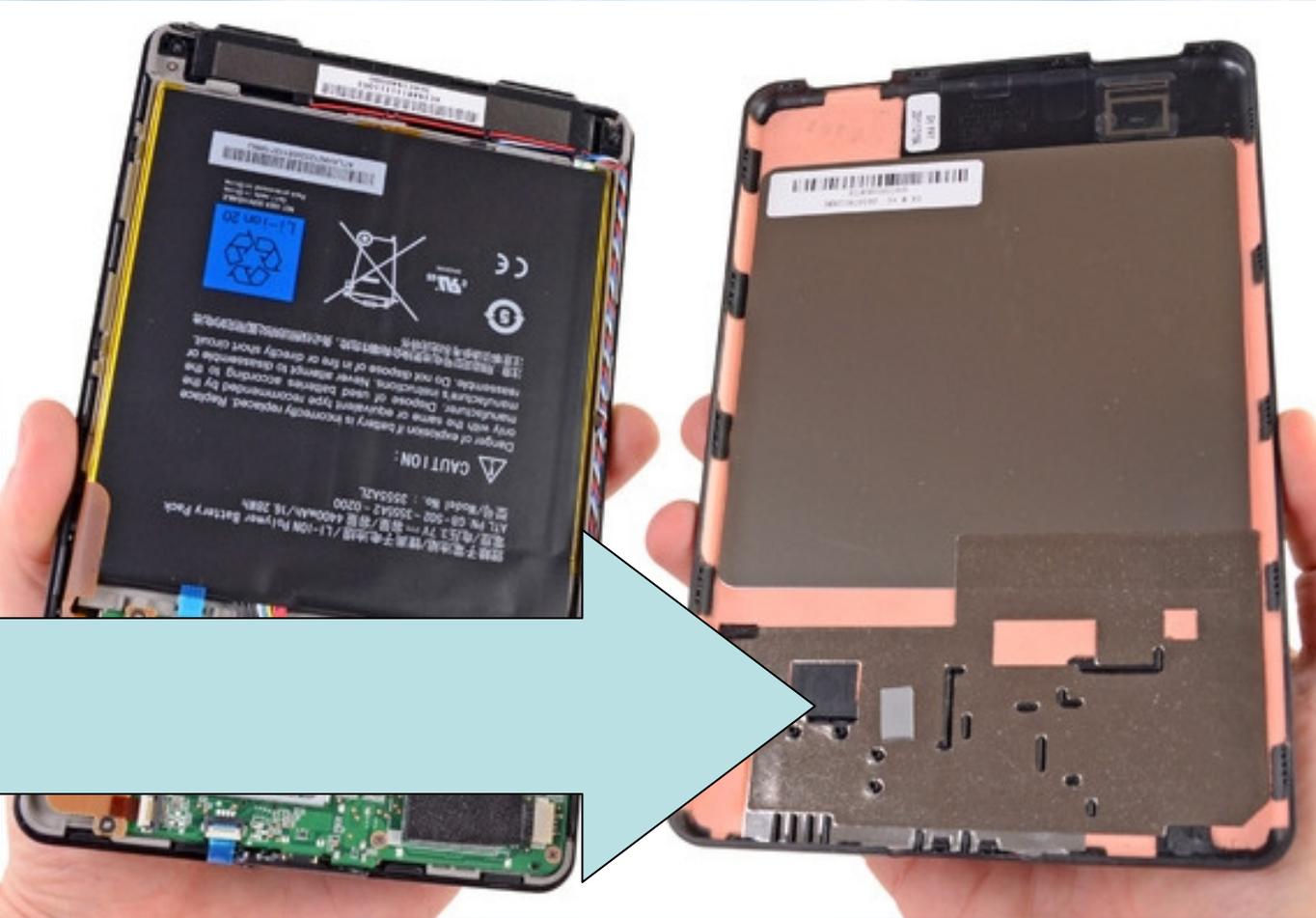
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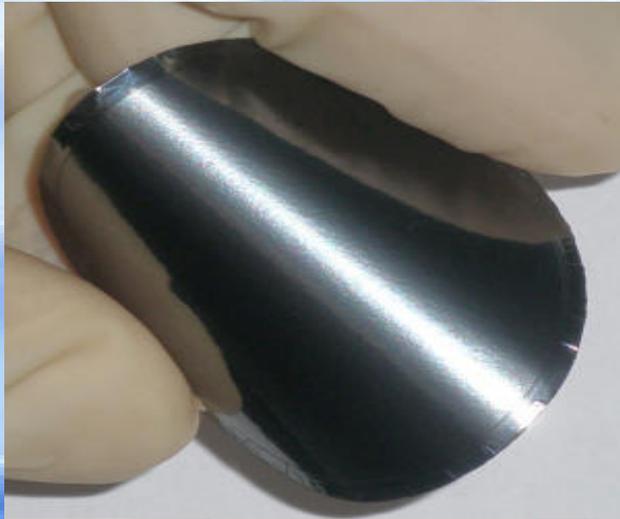
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GTS datasheet Revision 4.1 Updated: 01/07/2010

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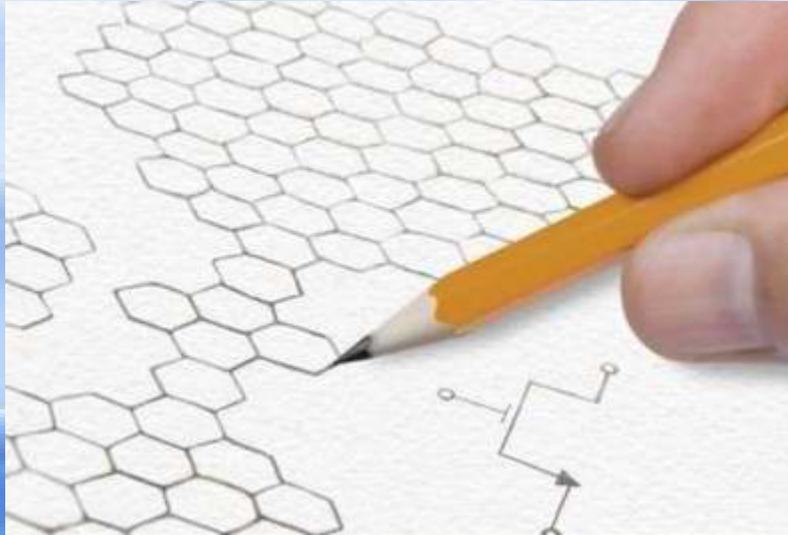
Fax: +086-755-61104016

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