

# Product Introduction

# Extruded Section



Extrusion heat sinks are the mainstay for cooling medium power semi-conductors .many shapes available to fit diverse applications .thousands of shapes exist in the marketplace .

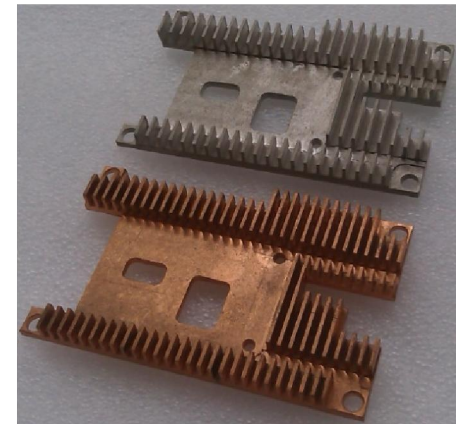
- Low cost
- Short production cycle
- Processing is simple



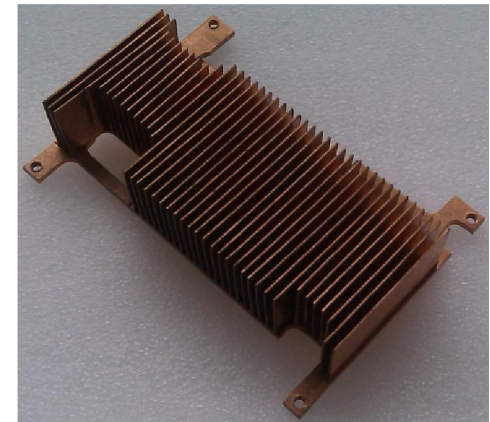
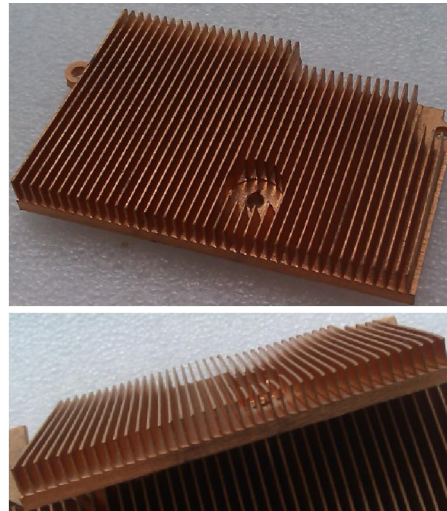
# Skived Heat Sink


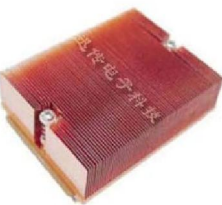
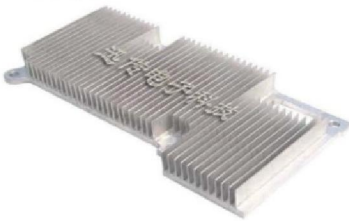
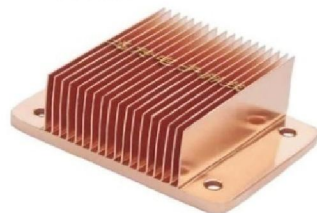
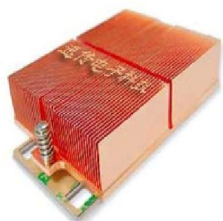


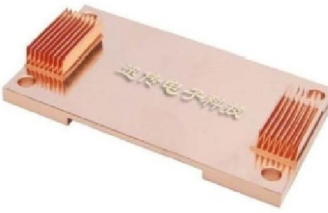


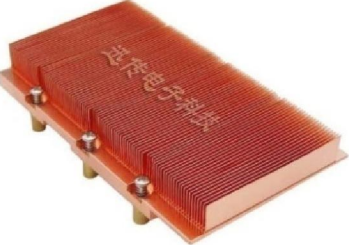



Heat sink skived fin technology provides the best thermal performance when not use heat pipe .the biggest advantage is thinner fin ,smaller gap than extruded section . no glue is used in the process



- Flexible for fin thickness and pitch
- Seamless contact between base and fin



 <p><b>SPC1U12SK001</b>          详述:          插槽: Socket K8          尺寸: 100.0x74.0x24.0mm          重量: 520g          材质: Copper          适用: 1U server</p> <p>AMD® Socket K8/F1207 3.5"/754/939/940</p>	 <p><b>SPC1U12SK002</b>          详述:          插槽: Socket K8          尺寸: 100x74.0x24.0mm          重量: 500g          材质: copper          适用: 1U server</p> <p>AMD® Socket K8/F1207 3.5"/754/939/940</p>	 <p><b>IASK004</b></p> <p>尺寸: 80x150x16mm          材质: Aluminum          适用: 显卡、服务器、工控机、电源类等</p>	 <p><b>ICSK002</b></p> <p>尺寸: 75x90x25mm          材质: Copper          适用: 显卡、服务器、工控机、电源类等</p>
 <p><b>SAC1U12SK003</b>          详述:          插槽: Socket F1207 4.1"          尺寸: 115.0x76.0x24.0mm          重量: 550g          材质: copper          适用: 1U server</p> <p>AMD® Socket F1207 4.1"</p>	 <p><b>SAC1U12SK001</b>          详述:          插槽: Socket F1207 3.5"          尺寸: 100x74.0x27.0mm          重量: 390g          材质: copper          FAN: 75x75x15mm          转速: 5000RPM          轴承: Ball          线材: 4pin PWM          适用: 1U server</p> <p>AMD® Socket K8/F1207 3.5"/754/939/940</p>	 <p><b>ICSK003</b></p> <p>尺寸: 88x100x26mm          材质: Copper          适用: 显卡、服务器、工控机、电源类等</p>	 <p><b>ICSK004</b></p> <p>尺寸: 65x120x18mm          材质: Copper          适用: 显卡、服务器、工控机、电源类等</p>
 <p><b>SPC1UAMSK00</b>          详述:          插槽: Socket AM2          尺寸: 106.0x78.0x23.5 mm          重量: 560g          材质: Copper          适用: 1U server</p>	 <p><b>SAC1UAMSK001</b>          详述:          插槽: Socket AM2          尺寸: 106x78.0x27.5 mm          重量: 490g          材质: copper          FAN: 75x75x15mm          转速: 5000RPM          轴承: Ball          线材: 4pin PWM          适用: 1U server</p>	 <p><b>ICSK005</b></p> <p>尺寸: 95x175x26mm          材质: Copper          适用: 变频器、服务器、工控机、电源类等</p>	 <p><b>ICSK006</b></p> <p>尺寸: 120x100x18.5mm          材质: Copper(双面齿)          适用: 显卡、服务器、工控机、电源类等</p>



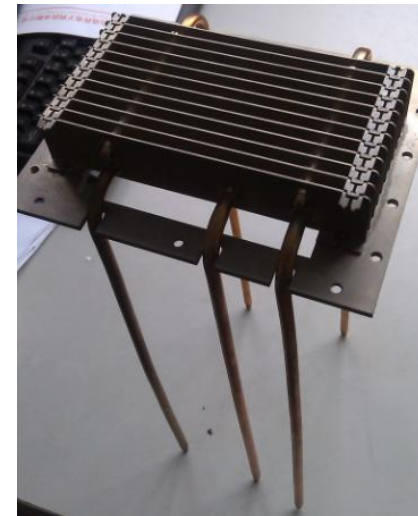
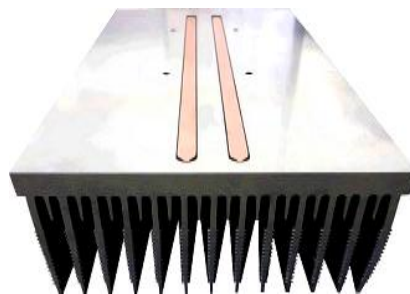
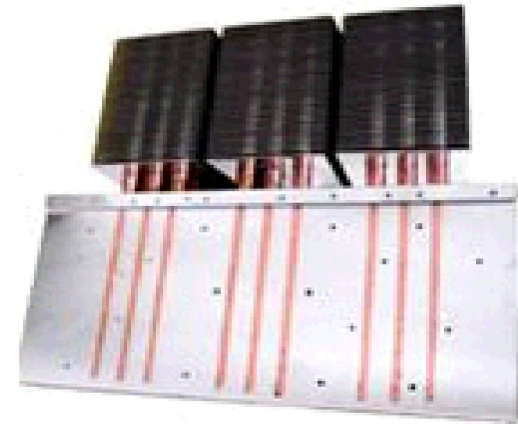
# Heat Pipe Cold Plate



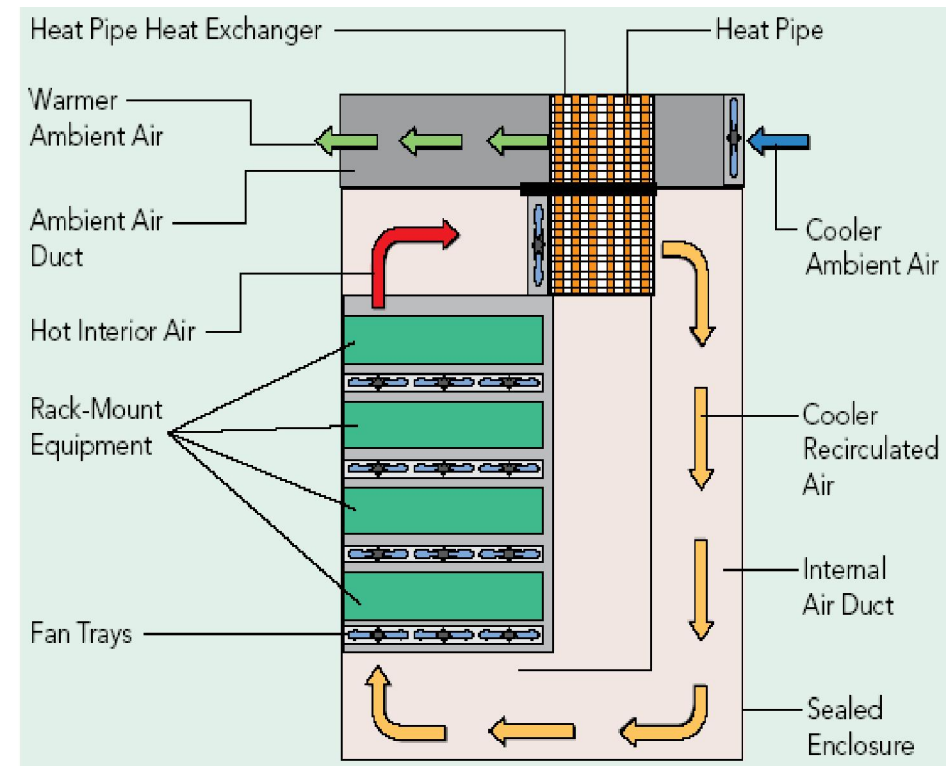
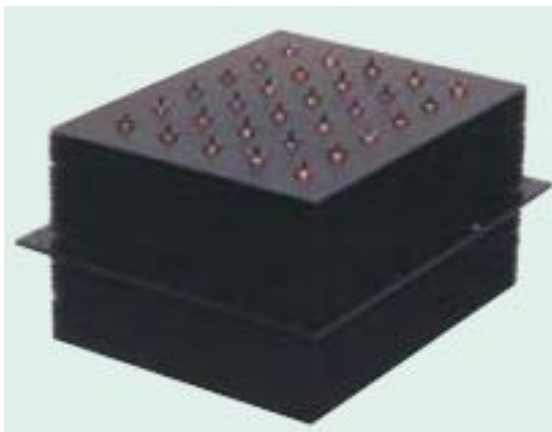
Heat pipe cold plate technology uses heat pipes embedded in an aluminum plate to provide the necessary high-efficiency heat transfer in space and weight constrained applications .by using heat pipes ,the cold plate has the weight of aluminum with an effective thermal conductivity more than four times that of copper .it is capable of operating in harsh environments including high altitude ,extreme temperatures /humidity ,shock and vibration .



Uses heat pipe technology to move the heat from an attachment plate at the heat source to a location within the package where enough fin volume exists for adequate heat removal .fins are stacked on the heat pipes to provide adequate surface area for heat dissipation to the air .designed for applications with limited space directly above the component .multiple heat pipes can be used to transfer heat to a common airflow .thermal resistance is minimized through the use of a thermally conductive epoxy or solder efficiently transport the heat from the component to the fin stack for dispersal .the sink can be located above ,below or on the same level as the heat source making possible a wide variety of design configurations .the sink attachment plate is typically made of aluminum or copper

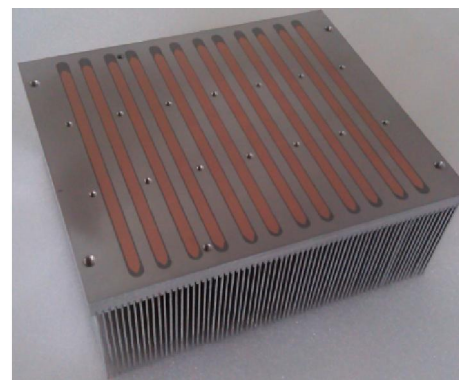


Heat pipe core units can be flexible thermal management system used to assure efficient cabinet level thermal manager .fin stacks can be tailored to accommodate different power loads and different air velocities in the ambient and internal loops .can be design the appropriate heat pipe core for each customer's application with a broad range of core sizes available .

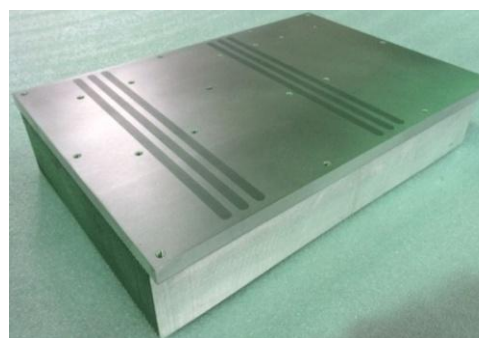


- IGBT cooling for power supply systems and industrial equipment

Embedding heat pipe into the heat sink is an effective cooling alternative to greatly enhance the performance of an existing heat sink with minimal design changes .embedded heat pipe extend overall heat sink operation with little to no system updates ,providing improvement in your existing heat sink .high heat flux in concentrated areas can be spread across a heat sink by placing the hot spot over one end of the heat pipe which becomes the evaporator and the heat is transferred to the cooler part of the heat sink where it condenses releasing the heat to the heat sink .heat pipes inserted into the grooves of a heat sink base may reduce a heat sink's thermal resistance by up to 50% .this allows embedded heat pipes to provide necessary improvements to your existing heat sink where needed .



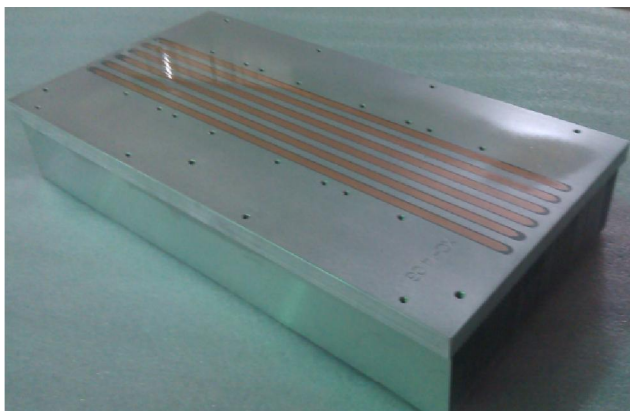
Bonding heat sink



Skived heat sink

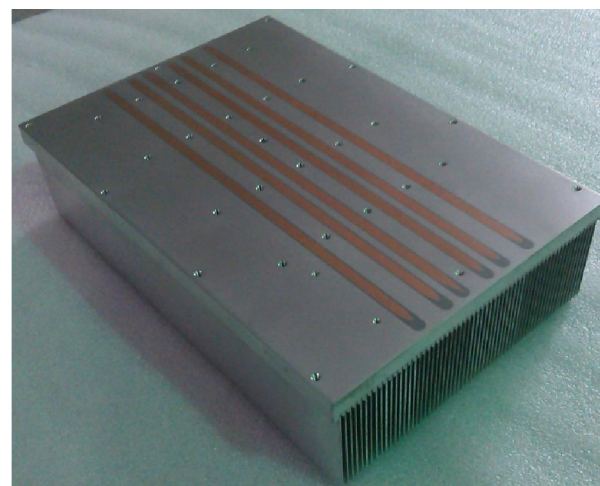
- Flexible for fin thickness and pitch
- Seamless contact between base and fin

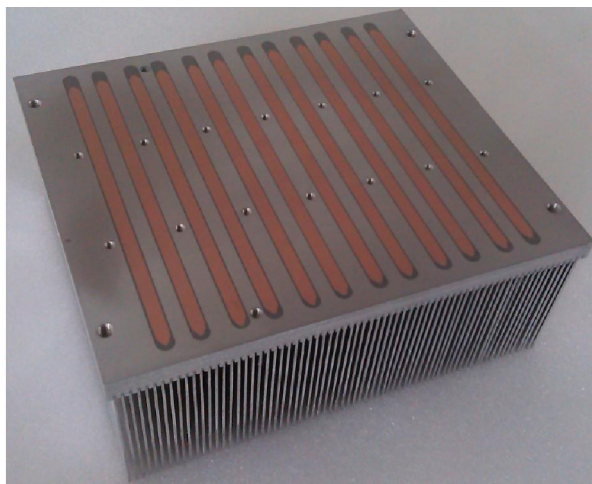




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IGBT Number: 4  
Power Dissipation : 750W/per  
HS Size:500\*260\*90

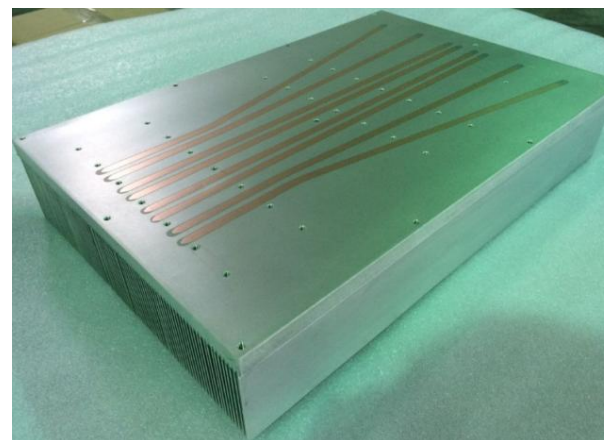
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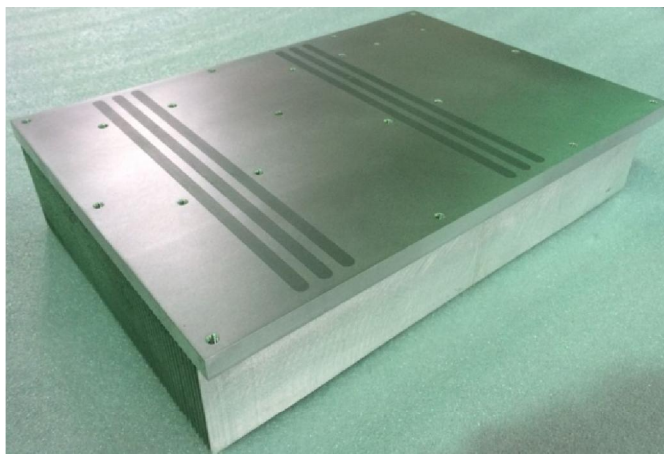




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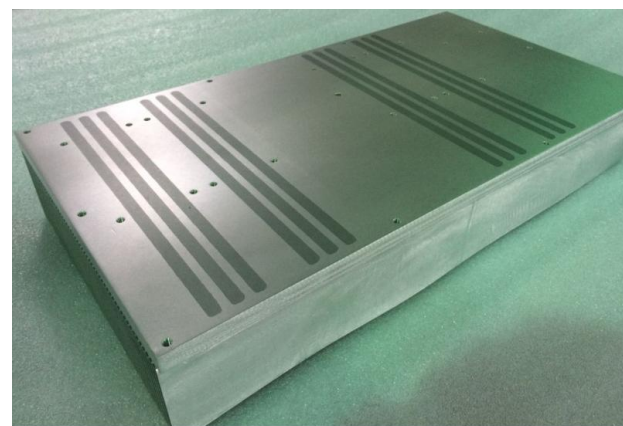
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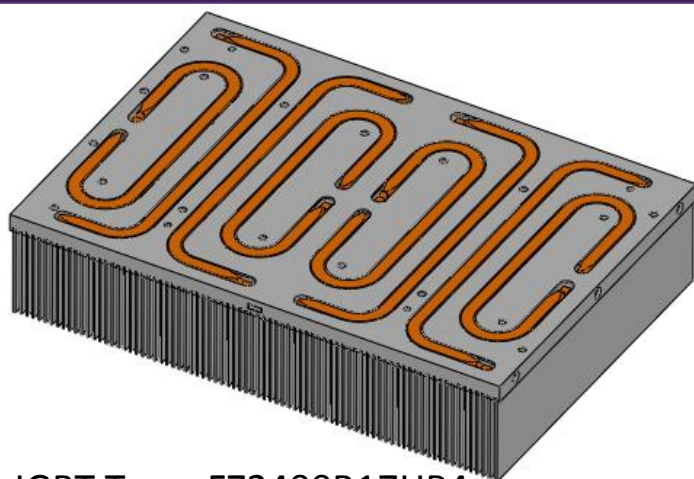




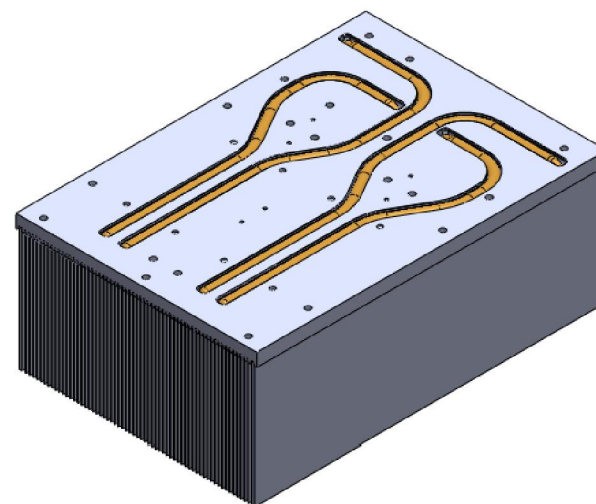
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IGBT Number: 2  
Power Dissipation : 1000W/per  
HS Size:380\*260\*80

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Power Dissipation : 750W/per  
HS Size:490\*260\*80

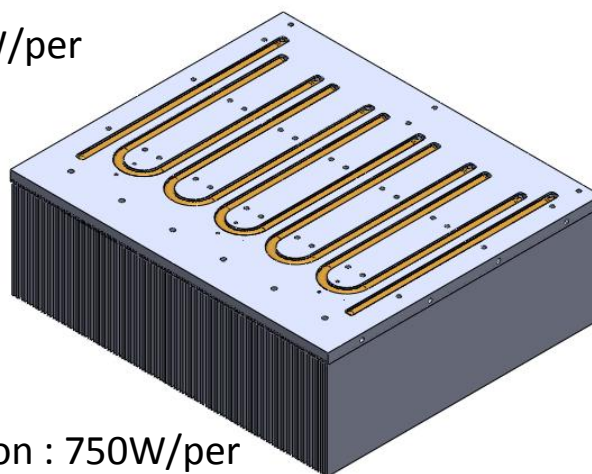




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Power Dissipation : 1500W/per  
HS Size:340\*250\*75

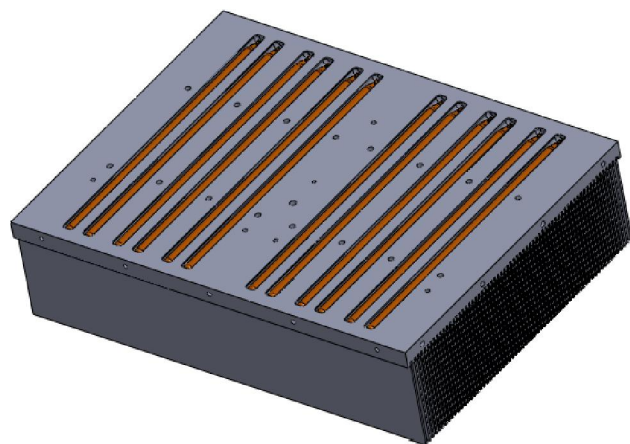


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Power Dissipation : 750W/per  
HS Size:360\*356\*140

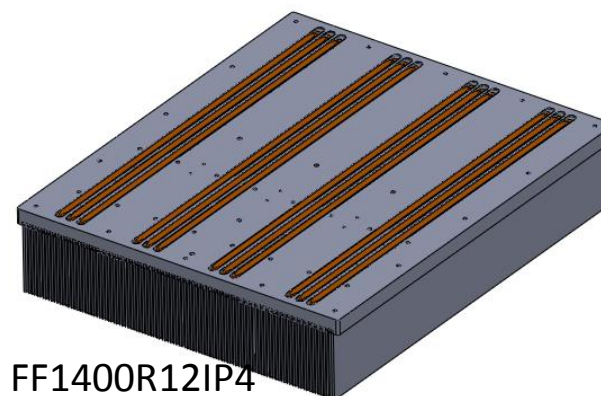


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IGBT Number: 2  
Power Dissipation : 750W/per  
HS Size:360\*356\*140

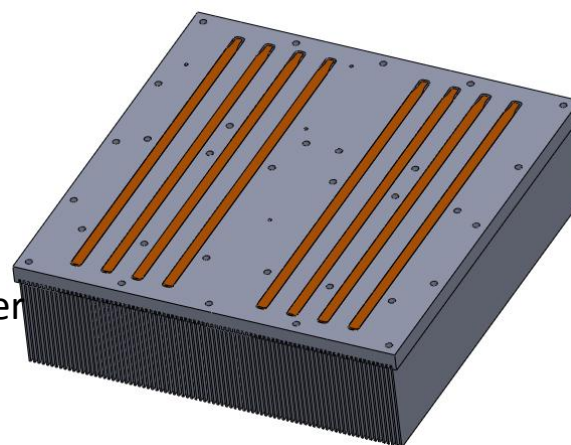




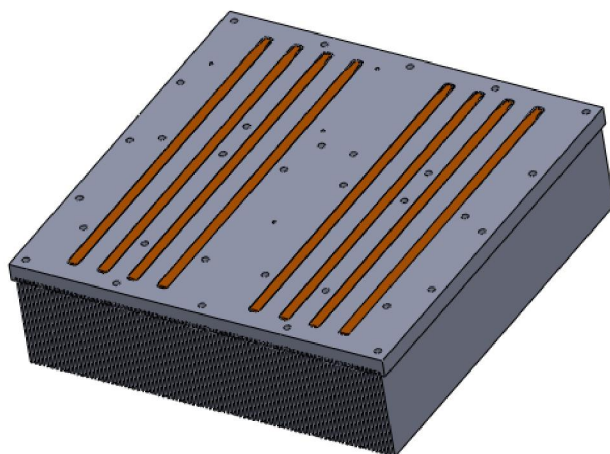
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Power Dissipation : 1350W/per  
HS Size:400\*300\*90



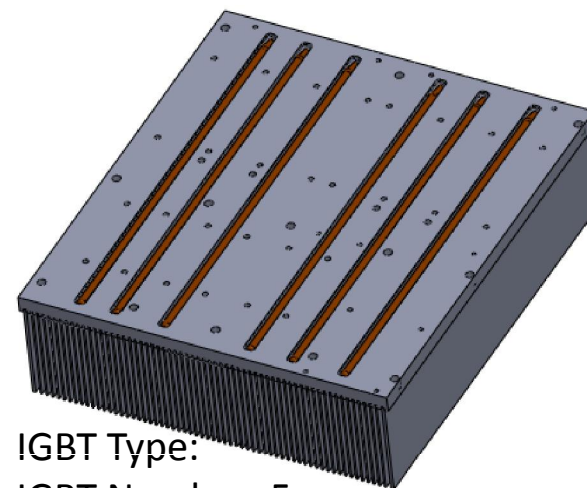
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Power Dissipation : 900W/per  
HS Size:480\*400\*95



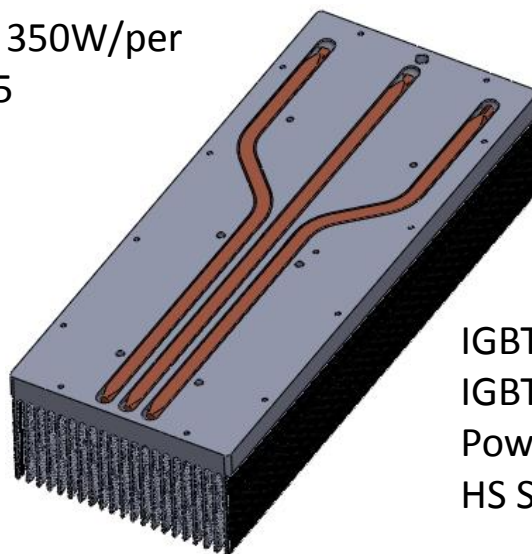
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Power Dissipation : 1100W/per  
HS Size:350\*350\*90



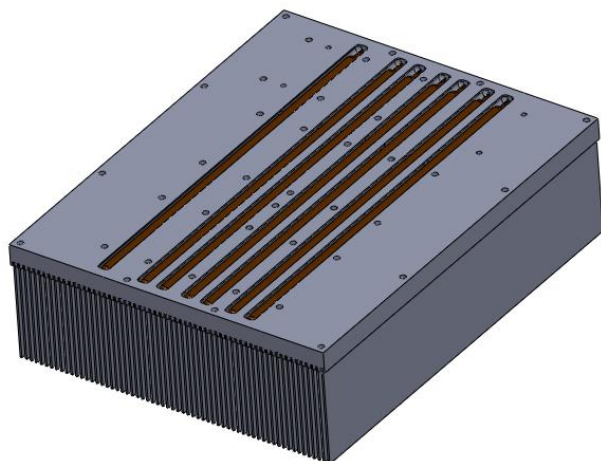
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IGBT Number: 4  
Power Dissipation : 350W/per  
HS Size:270\*260\*95



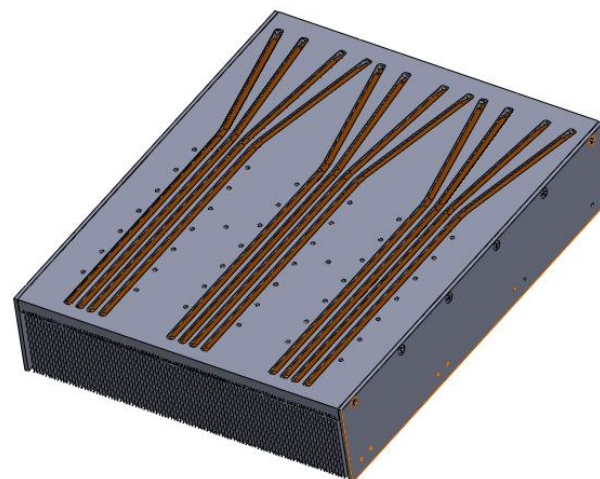
IGBT Type:  
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Power Dissipation : 450W/3&1100W/2  
HS Size:475\*225\*90



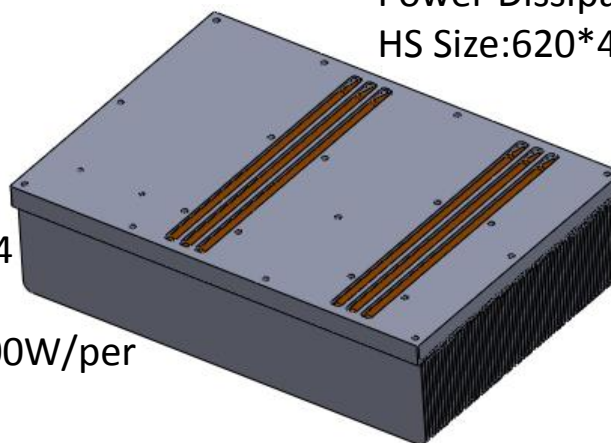
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Power Dissipation : 1350W/per  
HS Size:340\*140\*75



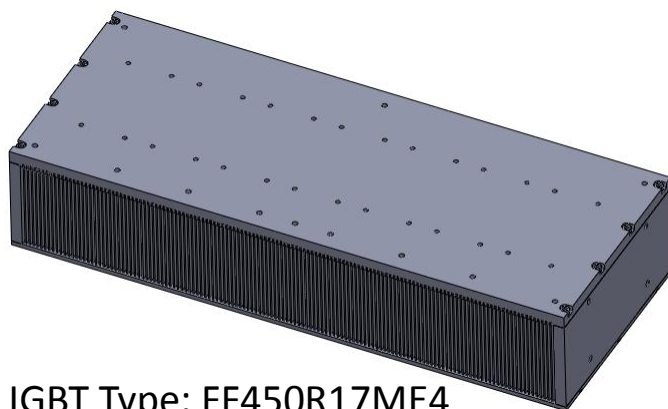
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Power Dissipation : 850W/per  
HS Size:350\*260\*90



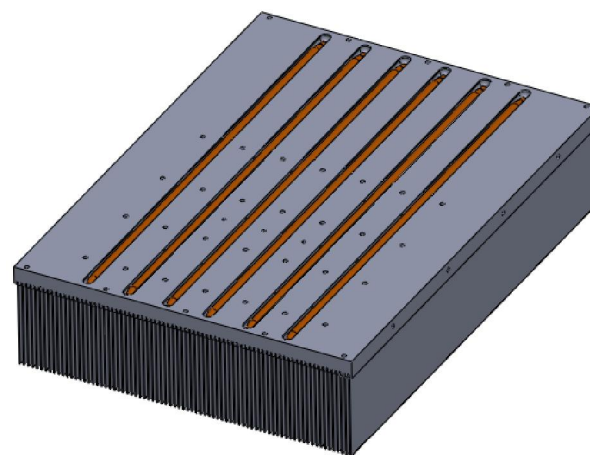
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Power Dissipation : 1550W/per  
HS Size:620\*450\*90



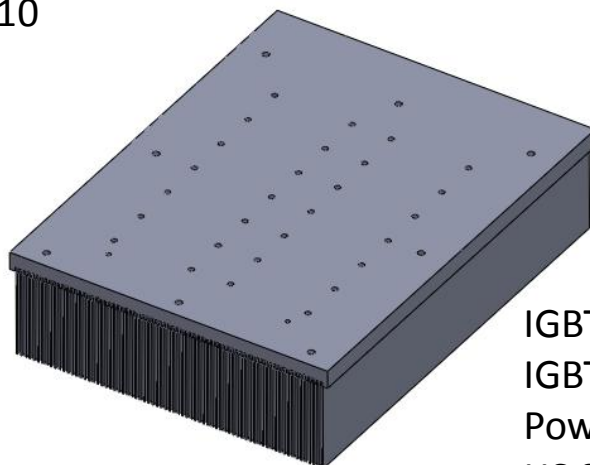
IGBT Type: FF650R17IE4  
IGBT Number: 2  
Power Dissipation : 1000W/per  
HS Size:380\*260\*90



IGBT Type: FF450R17ME4  
IGBT Number: 12  
Power Dissipation : 400W/per  
HS Size:630\*250\*110

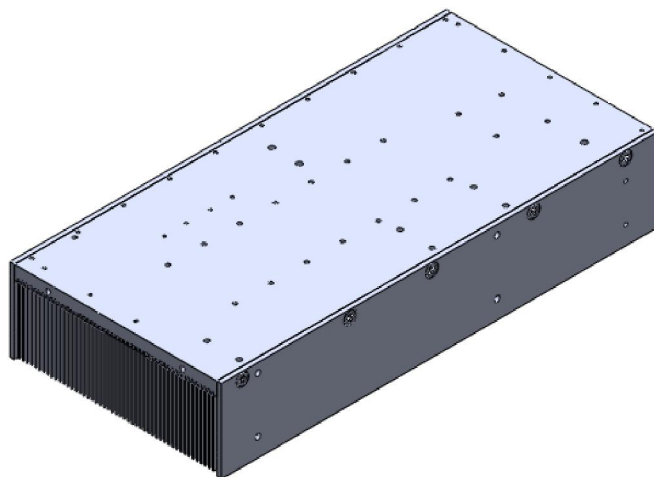


IGBT Type: FF1400R12IP4  
IGBT Number: 2  
Power Dissipation : 1600W/per  
HS Size:460\*320\*95



IGBT Type: FF450R17ME4  
IGBT Number: 2  
Power Dissipation : 500W/per  
HS Size:270\*180\*95



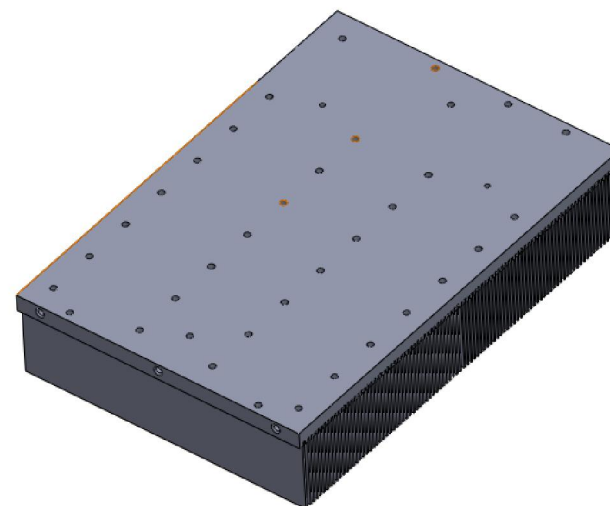


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IGBT Number: 1

Power Dissipation : 1650W/per

HS Size:475\*225\*90

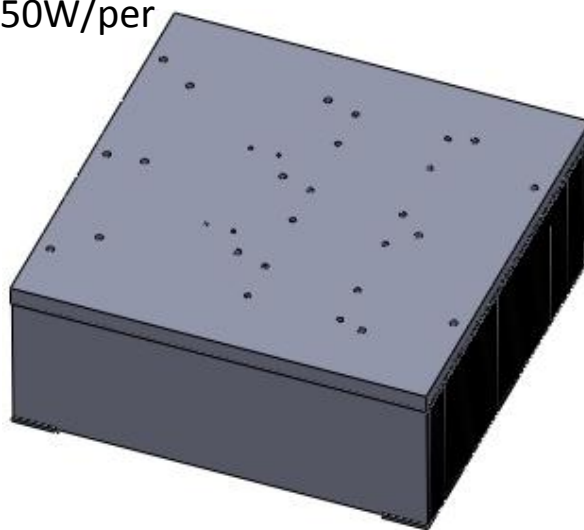


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IGBT Number: 2

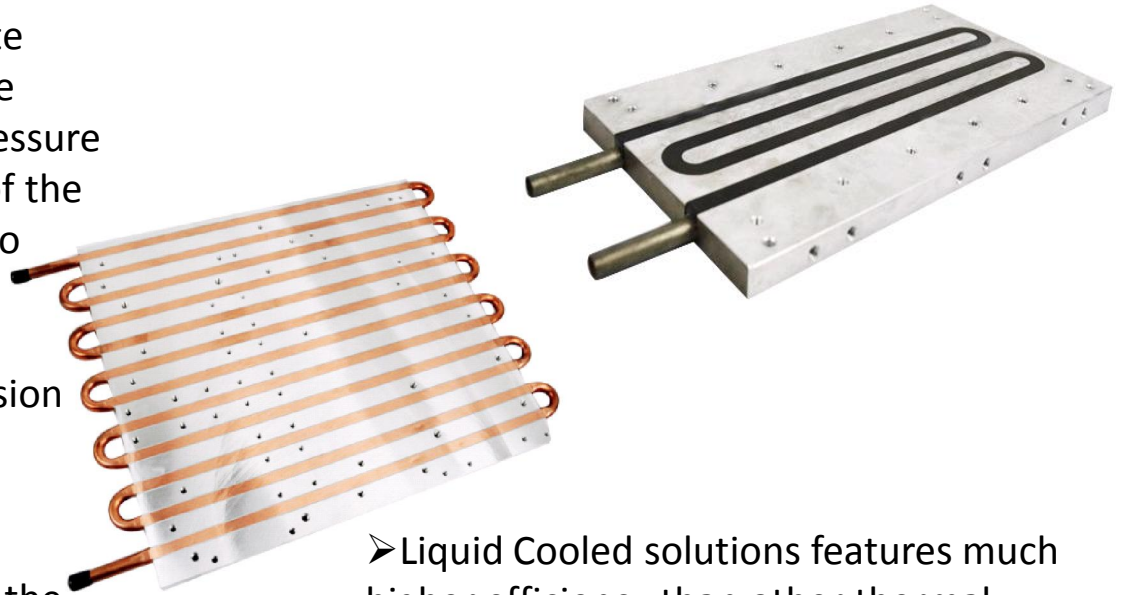
Power Dissipation : 740W/per

HS Size:350\*240\*80

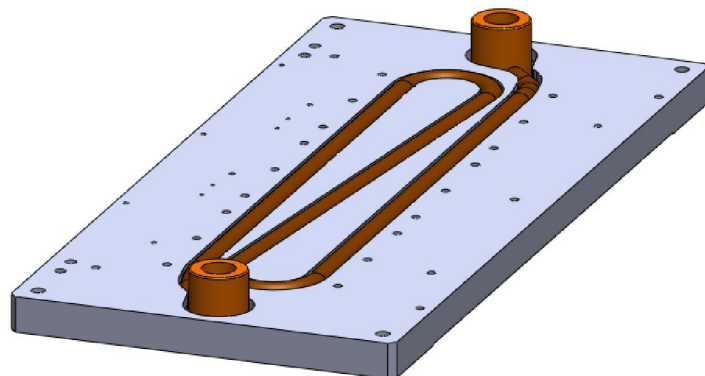


# Liquid Cooled Plates XUNCHUAN Electronics co., ltd.

Embedded tube in the surface of plate technology is engineered to match the thermal/mechanical performance ,pressure drop and dimensional requirements of the application .these embedded tube into plate cold plates consist of copper of stainless steel tubes pressed into a channeled aluminum or copper extrusion or machined plate .embedded in the surface of plate to provide the lowest thermal resistance between the semiconductor mounting surface and the cooling liquid .tubes can be bent into complex arrays to ensure the copper surface is directly under the semiconductor chips .

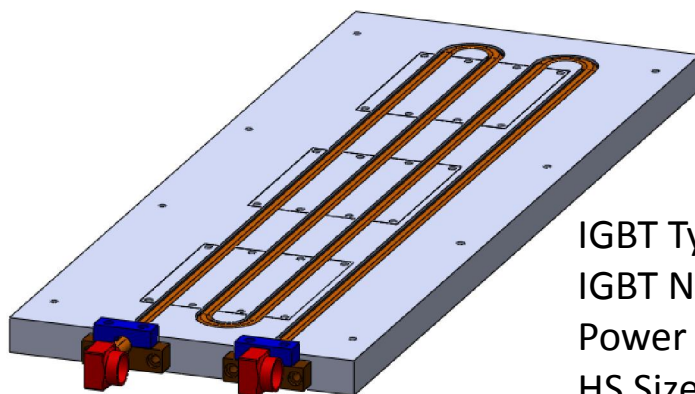
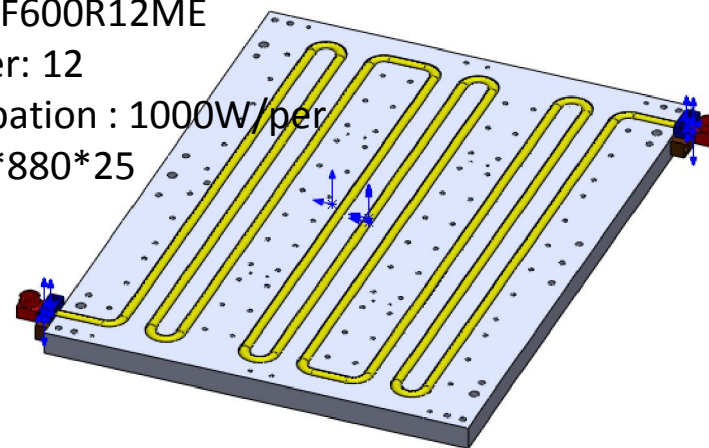


- Liquid Cooled solutions features much higher efficiency than other thermal options. It is mainly applied in UPS, industrial equipment ,power electronics ,inverter and convertors.
- Pump circulation system keeps the liquid moving inside
- Able to dissipate heat at both sides
- Applied in extremely high power more than 1000W



IGBT Type: cm400dy-66h  
IGBT Number: 3  
Power Dissipation : 2000W/per  
HS Size:600\*280\*20

IGBT Type: FF600R12ME  
IGBT Number: 12  
Power Dissipation : 1000W/per  
HS Size:800\*880\*25



IGBT Type:DD1200S17H4  
IGBT Number: 3  
Power Dissipation : 2500W/per  
HS Size:800\*30\*20

