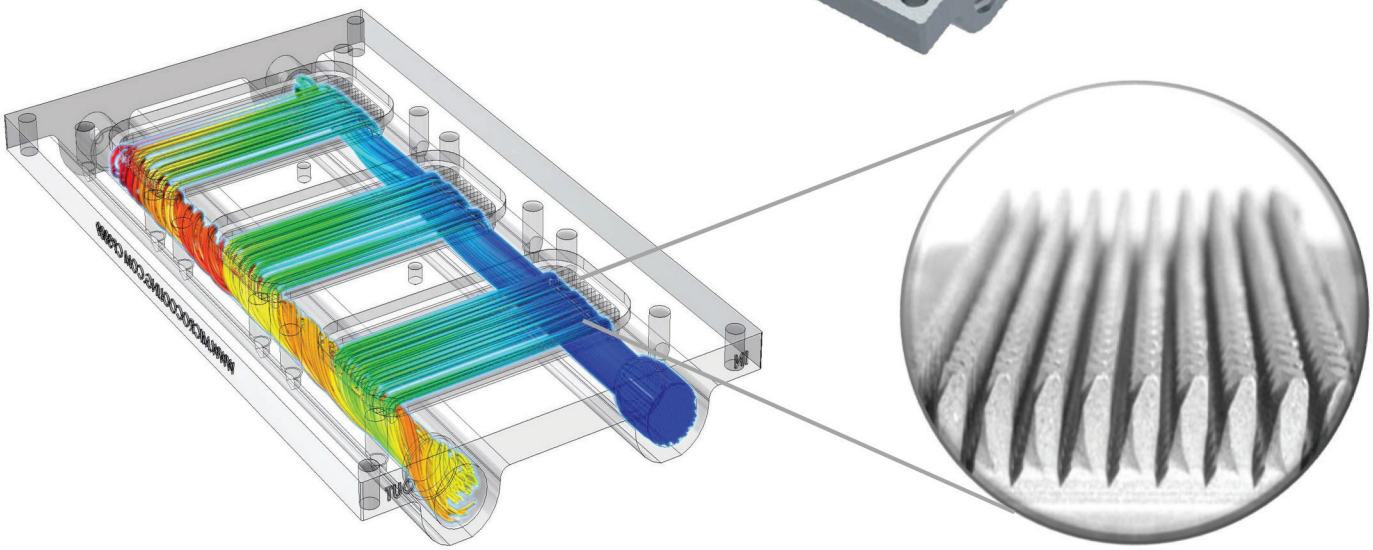
CP3012

wieland microcool

3000 series coldplate for the Wolfspeed XM3 module

The **CP3012** aluminum **friction stir welded** coldplate has been optimized specifically for the high heat flux of silicon carbide. The **MDT (micro deformation technology)** inside allows for the very low thermal resistance, low pressure drop and balanced parallel flow.



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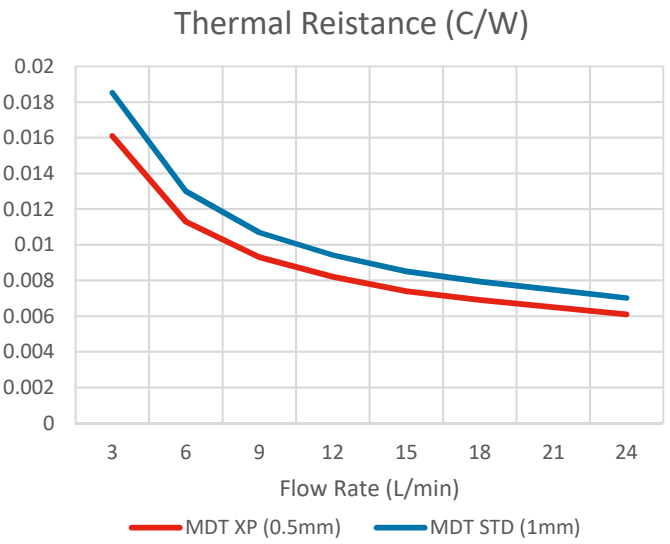
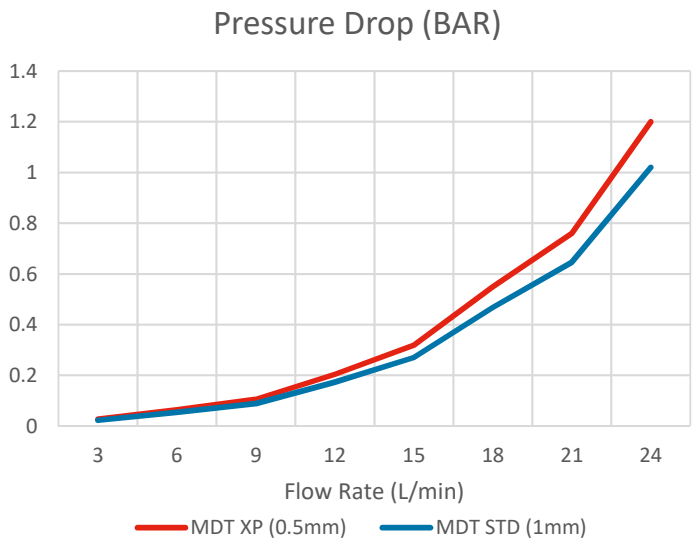


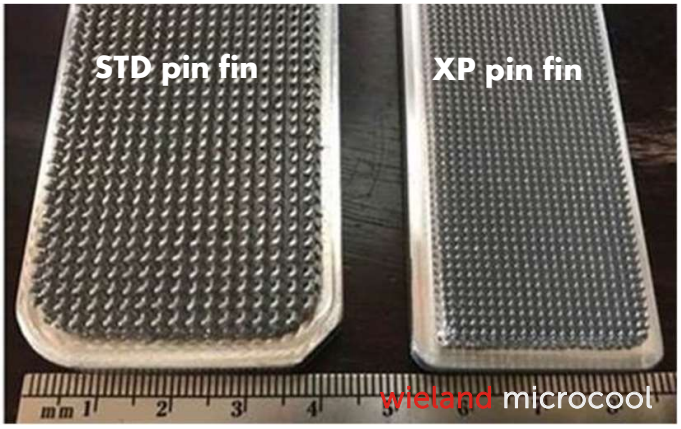


* Thermal resistance is calculated as the difference between maximum coldplate temp and the inlet fluid temp divided by the total coldplate power.

** Pressure drop is calculated from inlet to outlet without fittings, Coolant used for testing: 50/50 water and ethylene glycol.

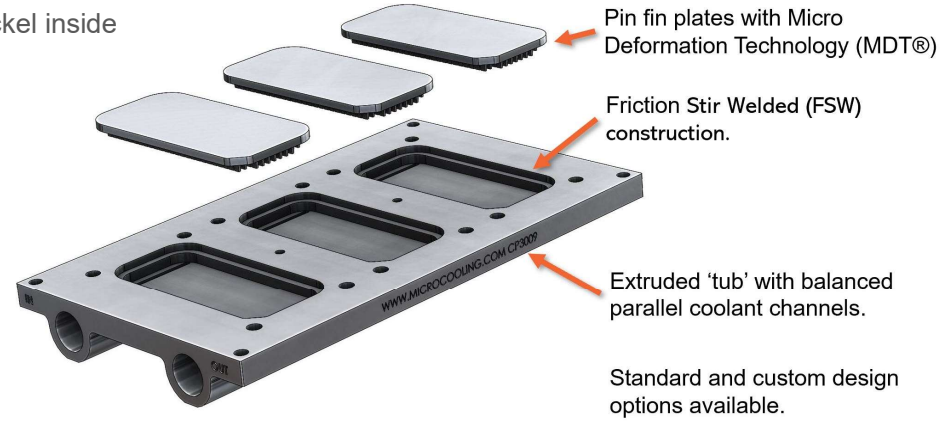
MDT In Line Pin Fin Options:

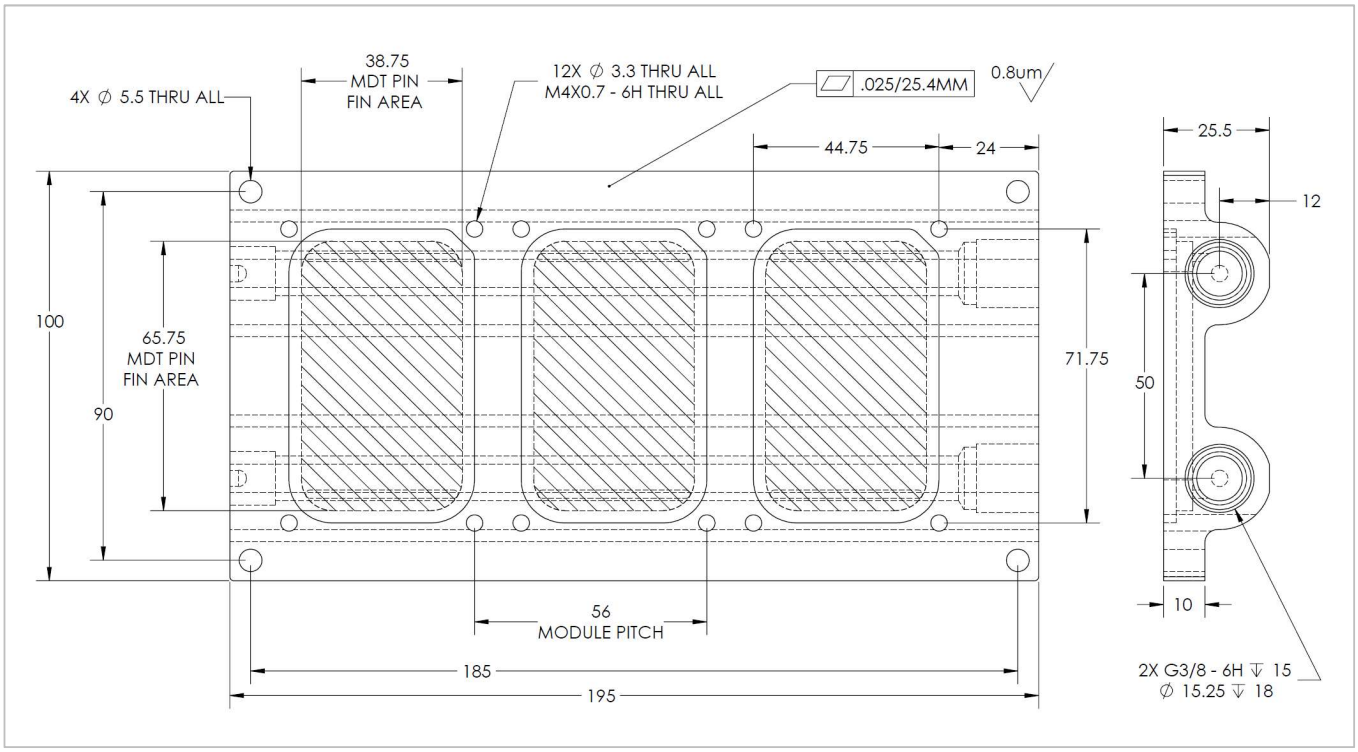
- **CP3012-STD**: 12 fin/inch, MDT™ in-line pin fin (~1mm gaps, good performance, lower pressure drop, better for uncontrolled or non-clean coolants)
- **CP3012-XP:** 20 fin/inch, MDT™ in-line pin fin (~0.5mm gaps, best performance, higher pressure drop)



Custom Options (call or email):

- Length: Extrusion length can change to accommodate up to 8 IGBTS
- Ports: NPT/SAE/BSPP (G)/ Welded on hose barb
- Plating Options: Electroless Nickel inside and out available
- Double sided options





NOTES:

1. DIMENSIONS AND TOLERANCES IAW ASME Y14.5M - 1994
2. MATERIAL: ALUMINUM 1100-H14 (FINPLATES) / ALUMINUM 6061-T6 (TUB)
3. MDT PIN FIN: 4MM TALL , IN LINE PIN FIN STD or XP (~1 - 0.5MM GAP AND DIA)
4. FINISHED ASSEMBLY MASS: 1082 GRAMS
5. LEAK TESTED TO 50 PSI