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.
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

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)

* 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.
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