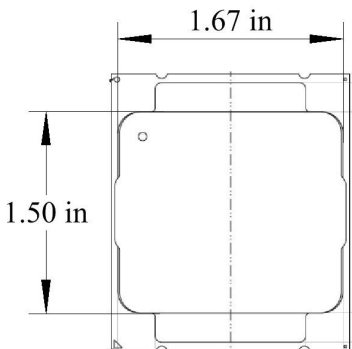
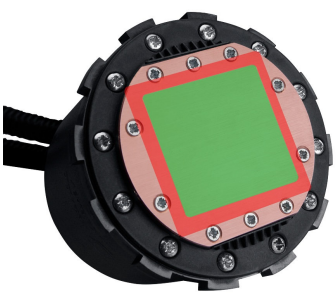


## Indigo XS™ / Indigo Xtreme™ Cooler Compatibility Application Note

This Application Note lists both coolers known to be incompatible and a selection of coolers noted as conditionally compatible, if certain conditions are met.

For installation tips and recommendations for your particular cooler, please see our other Application Notes. Feel free to contact us if you have a question about a cooler not listed.



**Update (12-7-15): Motherboard blocks (full board blocks & monoblocks) are incompatible Indigo Xtreme and Indigo XS.**

Incompatible Coolers (heat sinks, water blocks, factory sealed coolers, etc.)	Issues
 <p>Socket 2011-3 (Haswell-E)</p>	<p><b>Square/Rectangular cooler surfaces that do not contact the entire surface of the CPU lid:</b></p> <p>Any cooler surface which is smaller than the CPU lid is incompatible. For reference, the Socket 2011-3 (Haswell-E) lid dimensions are illustrated. <b>Some heat sink coolers incompatible with Indigo Xtreme for Haswell-E include: Noctua NH-D14 and NH-D15.</b></p>
	<p><b>Factory Sealed Coolers with exposed bolts/holes touching the CPU lid:</b></p> <p>Any CPU lid which contacts these bolts or holes (illustrated as the red region) is incompatible. <b>Some factory sealed coolers incompatible with Indigo Xtreme for Haswell-E include: Corsair H50 &amp; H110. Also see “Conditionally Compatible Coolers.”</b></p>




# ENERDYNE

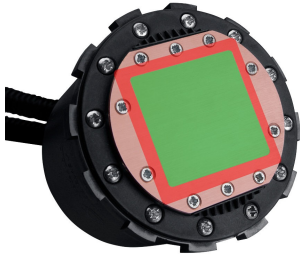
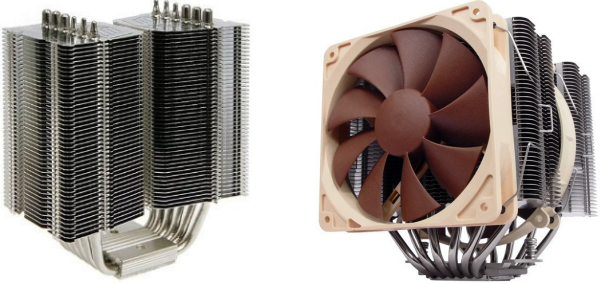
SOLUTIONS

Incompatible Coolers (cont.)	Issues
	<p><b>Circular cooler surfaces that do not contact the entire surface of the CPU lid:</b></p> <p>These include the boxed CPU cooler supplied with the purchase of a CPU.</p>
	<p><b>Heat pipe Direct Touch (HDT) Coolers:</b></p> <p>These and other sinks which have grooves and gaps between the baseplate and heat pipes are incompatible.</p>
	<p><b>Water blocks</b> with bolts/holes which may touch the CPU lid.</p> <p>Any bolts/bolt holes (on the interface surface) must not be in contact with the CPU lid surface.</p>
	<p><b>Gold plated blocks such as the EK Supreme HF Full Gold:</b></p> <p>The Indigo XS/Xtreme alloy will amalgamate with the gold plate, resulting in a bond (and loss of the original gold surface); lapping would be needed to remove the alloy from the block.</p>
	<p><b>Thermalright Ultra-120 Extreme CPU Heatsink:</b></p> <p>All clamping mechanisms which allow rotation/twisting of the sink after installation. The <b>Thermalright Venomous-X</b> may also be incompatible.</p>



# ENERDYNE SOLUTIONS

Incompatible Coolers (cont.)	Issues
	<p><b>Motherboard Blocks (Full Board &amp; Monoblocks):</b></p> <p>Motherboard blocks do not have compression springs which provide the uniform compression force necessary to ensure proper reflow while maintaining good thermal contact with the motherboard VRM (MOSFETs).</p>

Conditionally Compatible Coolers	Conditions Needed
<p><b>Factory Sealed Coolers with exposed bolts/holes:</b></p> 	<p><b>Orient the factory sealed cooler block to avoid exposed bolts/holes contacting the CPU lid:</b></p> <p>Certain factory sealed coolers may be compatible if the cooler block is oriented such that the CPU lid fits within the green region (as illustrated). <b>Some conditionally compatible coolers with Indigo Xtreme and Haswell-E include: Corsair H80 &amp; H100.</b></p>
<p><b>Large, high convection heat sinks such as the Prolimatech Megahalems and Noctua NH-D14 CPU Coolers:</b></p> 	<p><b>Eliminate all airflow to cooler to facilitate reflow:</b></p> <p>The reflow time for these large sinks will be significantly longer than what is suggested in the Installation Guide. It is critical to keep all airflow to a minimum during reflow (turn off all fans, seal up the PC chassis, cover up heat sink fins etc.) See our Noctua NH-D14 Application Note for installation tips.</p>