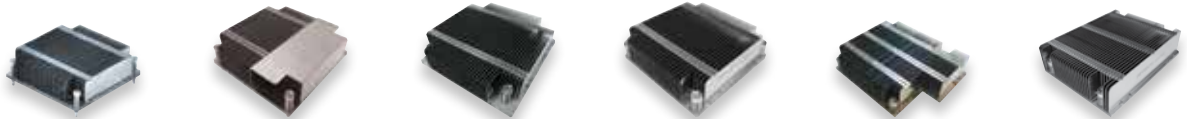
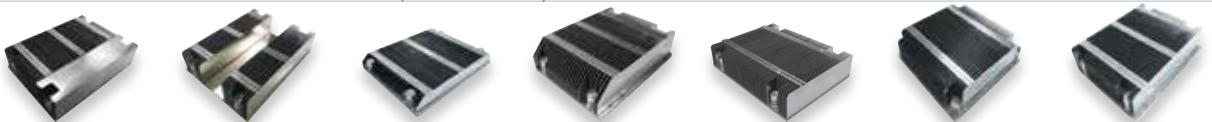


# Heatsinks (X10/X9)

## X9 and X10 1U Passive CPU Heat Sinks for UP, DP, and MP Systems



Part Number	SNK-P0037P	SNK-P0041	SNK-P0046P	SNK-P0047P	SNK-P0047PD	SNK-P0047PS
Form Factor	1U Passive, DP	Proprietary 1U Passive, DP (X9DBL Front CPU)	1U Passive, UP (X10/X9)	1U Passive, UP, DP	1U Passive, Proprietary, DP	1U Passive, UP, DP, MP
CPU Type	Intel® Xeon® Processor E5-2400 & E5-2400 v2 & v3 Series	Intel® Xeon® Processor E5-2400 & E5-2400 v2 & v3 Series	Intel® Xeon® Processor E3-1200, E3-1200 v2 & v3 Series; 2nd Generation Intel® Core™ i3 Processors	Intel® Xeon® Processor E5-2600 & E5-2600 v2 & v3 product family	Intel® Xeon® Processor E5-2600 & E5-2600 v2 & v3 product family	Intel® Xeon® Processor E5-2600 & E5-2600 v2 & v3 and E5-4600 Series
Socket Type	LGA 1356	LGA 1356	LGA 1155 & LGA1150	LGA 2011 (Square ILM)	LGA 2011 (Square ILM)	LGA 2011 (Narrow ILM)
Major Integrated Part	Copper + Aluminum Base Aluminum Fins Heat Pipes	Copper Base Aluminum Fins	Copper + Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes
Dimension	90L x 90W x 27H mm	90L x 90W x 27H mm	95L x 95W x 27H mm	90L x 90W x 26H mm	90L x 110W x 27H mm	104L x 80W x 26H mm
Mounting Method	Screws + Springs	Screws + Springs	Screws + Springs Mounting Bracket (BKT-0028L Included)	Screws + Springs	Screws + Springs	Screws + Springs



Part Number	SNK-P0047PSC	SNK-P0047PSM	SNK-P0047PSR	SNK-P0047PS+	SNK-P0047PW	SNK-P0057P	SNK-P0057PS
Form Factor	Proprietary 1U Passive, DP (1U 3/4 GPU/Xeon Phi™ Front CPU)	Proprietary 1U Passive, DP (2U Twin2+ Front CPU), Twin Pro2	Low Profile Passive, Proprietary, UP (X10/X9) 12-node MicroCloud Servers	Proprietary 1U Passive, UP (X10/X9) (Micro Cloud Server)	Proprietary 1U Passive, DP (2U Twin2 Rear CPU)	1U Passive, UP, DP	1U Passive, UP, DP, MP
CPU Type	Intel® Xeon® Processor E5-2600 & E5-2600 v2 & v3 product family	Intel® Xeon® Processor E5-2600 & E5-2600 v2 & v3 product family	Intel® Xeon® processor E3-1200/E3-1200v2/E3-1200v3 series	Intel® Xeon® Processor E3-1200, E3-1200 v2 & v3 and E5-2600 & E5-2600 v2 & v3 product family	Intel® Xeon® Processor E5-2600 & E5-2600 v2 & v3 product family	Intel® Xeon® Processor E5-2600, E5-2600 v2, and E5-2600 v3 Series	Intel® Xeon® Processor E5-2600, E5-2600 v2, E5-2600 v3, and E5-4600 Series
Socket Type	LGA 2011 (Narrow ILM)	LGA 2011 (Narrow ILM)	LGA 1150 & LGA 1155	LGA 1155 & LGA1150, LGA2011 (Narrow ILM), Copper + Aluminum Base	LGA 2011 (Square ILM)	LGA 2011 (Square ILM)	LGA 2011 (Narrow ILM)
Major Integrated Part	Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes	Copper + Aluminium Base Copper Fins Heat Pipes	Copper + Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Copper + Aluminum Fins Heat Pipes	Copper + Aluminum Base Copper Fins Heat Pipes	Copper + Aluminum Base Copper Fins Heat Pipes
Dimension	104L x 80W x 26H mm	104L x 80W x 26H mm	104L x 80W x 15H mm	104L x 80W x 30H mm	90L x 116W x 26H mm	90L x 90W x 26H mm	104L x 80W x 26H mm
Mounting Method	Screws + Springs	Screws + Springs	Springs + Screws	Screws + Springs	Screws + Springs	Screws + Springs	Screws + Springs

## X9 and X10 2U Passive CPU Heat Sinks for UP, DP, and MP Systems



Part Number	SNK-P0038P	SNK-P0048P	SNK-P0048PS	SNK-P0048PSC	SNK-P0048PW	SNK-P2048P
Form Factor	2U(+) Passive, DP	2U(+) Passive, UP, DP	2U(+) Passive, UP, DP, MP	Proprietary 2U Passive, DP (2U WIO+ Server)	Proprietary 2U Passive, DP (2U Twin Rear CPU)	Proprietary 2U Passive, DP (HFT Series Servers)
CPU Type	Intel® Xeon® Processor E5-2400 & E5-2400 v2 & v3 Series	Intel® Xeon® Processor E5-2600 & E5-2600 v2 & v3 product family	Intel® Xeon® Processor E5-2600 & E5-2600 v2 & v3 and E5-4600 Series	Intel® Xeon® Processor E5-2600, E5-2600 v2, and E5-2600 v3 Series	Intel® Xeon® Processor E5-2600 & E5-2600 v2 & v3 product family	Intel® Xeon® Processor E5-2600 & E5-2600 v2 & v3 product family
Socket Type	LGA 1356	LGA2011 (Square ILM)	LGA2011 (Narrow ILM)	LGA2011 (Narrow ILM)	LGA 2011 (Square ILM)	LGA2011 (Square ILM)
Major Integrated Part	Copper + Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Copper + Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes
Dimension	90L x 90W x 64H mm	90L x 90W x 64H mm	104L x 80W x 64H mm	104L x 80W x 64H mm	90L x 116W x 64H mm	90L x 170W x 64H mm
Mounting Method	Screws + Springs	Screws + Springs	Screws + Springs	Screws + Springs	Screws + Springs	Screws + Springs

## X9 and X10 Active CPU Heat Sinks for UP and DP Systems



Part Number	SNK-P0035AP4	SNK-P0040AP4	SNK-P0046A4	SNK-P0048AP4	SNK-P0050AP4	SNK-P2050AP4	SNK-P0051AP4
Form Factor	4U Active, DP	4U Active, DP	2U(+) Active, UP (X10/X9)	2U(+) Active, UP, DP	4U Active, UP, DP	Proprietary 4U Active, DP (HFT Series Servers)	4U Active, UP
CPU Type	Intel® Xeon® Processor E5-2400 & E5-2400 v2 & v3 Series	Intel® Xeon® Processor E5-2400 & E5-2400 v2 & v3 Series	Intel® Xeon® Processor E3-1200, E3-1200 v2 & v3 Series; 2nd Generation Intel® Core™ i3 Processors	Intel® Xeon® Processor E5-2600 & E5-2600 v2 & v3 product family	Intel® Xeon® Processor E5-2600 & E5-2600 v2 & v3 product family	Intel® Xeon® Processor E5-2600 & E5-2600 v2 & v3 product family	Intel® Xeon® Processor E3-1200/v2/v3 family
Socket Type	LGA 1356	LGA 1356	LGA1155 & LGA1150	LGA 2011 (Square and Narrow ILMs)	LGA 2011 (Square and Narrow ILMs)	LGA 2011 (Square ILM)	LGA 1150 & LGA 1155
Material	Copper Base Aluminum Fins Heat Pipes Cooling Fan (Front Side)	Copper Base Aluminum Fins Heat Pipes Cooling Fan (Rear Side)	Copper Base Aluminum Fins Cooling Fan (Top)	Aluminum Base Aluminum Fins Heat Pipes Cooling Fan (Front Side)	Copper Base Aluminum Fins Heat Pipes Cooling Fan (Front Side)	Copper Base Aluminum Fins Heat Pipes Cooling Fan (Middle Side)	Copper Base Aluminum Fins Heat Pipes Cooling Fan (Front Side)
Dimension	105L x 100W x 126H mm	105L x 100W x 126H mm	90D x 65H mm	85L x 80W x 65L mm	105L x 93W x 126H mm	96L x 130W x 125H mm	105L x 93W x 128H mm
Mounting Method	Screws + Springs Mounting Bracket (BKT-0023L Included)	Screws + Springs	Push-in Pins	Screws + Springs; Mounting Brackets (BKT-0048L-RS and BKT-0048L-RN Included)	Screws + Springs; Mounting Brackets (for Square and Narrow ILMs Included)	Screws + Springs	Back Plate + Springs + Screws BKT-0028L Included