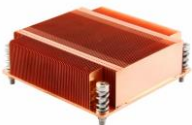
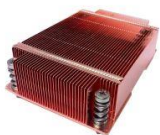
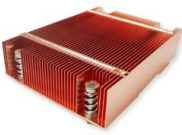


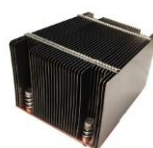
CPU-Cooler	R-1	R-2	R-12	R-15
Picture				
Socket	LGA2011	LGA2011	LGA2011 (Narrow Type ¹)	LGA2011 (Square Type ²)
Processor	Intel® Sandy Bridge EP/EX processors	Intel® Sandy Bridge E/EP processors	Intel® Sandy Bridge Romley-E/EP ILM processors*	Intel® Sandy Bridge E/EP processors*
			*supports CPUs up to TDP 95W	*supports CPUs up to TDP 150W
Solution	1U Server	1U Server	1U Server	1U & Up Server
Type	Passive	Passive	Passive	Passive
Material	Copper based Vapor chamber with copper stacked fin	Copper based Vapor chamber with copper stacked fin	Copper based Vapor chamber with copper stacked fin	Copper base with aluminium skived fins
Fan Dimension (H/W/D)	-	-	-	-
Fan Speed	-	-	-	-
Bearing	-	-	-	-
Rated Voltage	-	-	-	-
Power	-	-	-	-
Air Flow	-	-	-	-
Noise Level	-	-	-	-
Air Pressure	-	-	-	-
Connector	-	-	-	-
Overall Dimension (H/W/D)	23.5x88x90mm	27x90x90mm	25.5x70x106mm	27x90x90mm
Weight	450g	435g	520g	475g
Article Number	88885203	88885170	88885202	88885174
EAN-Code	4260133123526	4260133124042	4260133124875	4260133124080
Note	-	-	Shin-Etsu G751 Pre-Printed Backplate / Back Strips is not included	Shin-Etsu G751 Pre-Printed Backplate / Back Strips is not included
				¹ 56x94mm mounting pitch ² 80x80mm mounting pitch

CPU-Cooler	R-19	T-318	R-3	R-13
Picture				
Socket	LGA2011 (Narrow Type ¹)	LGA2011 (Narrow Type ¹)	LGA2011	LGA2011 (Narrow Type ¹)
Processor	Intel® Sandy Bridge EP/EX processors* *supports CPUs up to TDP 135W	Intel® Sandy Bridge EP/EX Narrow ILM processors (E5-1600, E5-2600 and E5-4600)* *supports CPUs up to TDP 135W	Intel® Sandy Bridge E/EP processors	Intel® Sandy Bridge EP/EX Narrow ILM processors* *supports CPUs up to TDP 95W
Solution Type	1U & Up Server Passive	1U & Up Server Passive	1U Server Active	1U Server Active
Material	Vapor chamber with copper stacked fin	Vapor chamber with copper stacked fin	Copper	Copper
Fan Dimension (H/W/D)	-	-	15x75x75mm	15x80x80mm
Fan Speed	-	-	At Duty Cycle 20%: 1000RPM At Duty Cycle 50%: 3500RPM At Duty Cycle 100%: 6000RPM	At Duty Cycle 20%: 1000RPM At Duty Cycle 50%: 3500RPM At Duty Cycle 100%: 7000RPM
Bearing	-	-	2x Ball Bearing	2x Ball Bearing
Rated Voltage	-	-	12V	12V
Power	-	-	At Duty Cycle 20%: 0.6W At Duty Cycle 50%: 3.84W At Duty Cycle 100%: 14.4W	At Duty Cycle 20%: 0.6W At Duty Cycle 50%: 3.84W At Duty Cycle 100%: 19.2W
Air Flow	-	-	At Duty Cycle 20%: 10.194cbm/h At Duty Cycle 50%: 17.669cbm/h At Duty Cycle 100%: 30.071cbm/h	At Duty Cycle 20%: 11.04cbm/h At Duty Cycle 50%: 19.03cbm/h At Duty Cycle 100%: 37.85cbm/h
Noise Level	-	-	At Duty Cycle 20%: 21dBA At Duty Cycle 50%: 43.7dBA At Duty Cycle 100%: 55dBA	At Duty Cycle 20%: 21.5dBA At Duty Cycle 50%: 43.0dBA At Duty Cycle 100%: 51.94dBA
Air Pressure	-	-	At Duty Cycle 20%: 21.57Pa At Duty Cycle 50%: 177.5Pa At Duty Cycle 100%: 520.73Pa	At Duty Cycle 20%: 22.25Pa At Duty Cycle 50%: 181.89Pa At Duty Cycle 100%: 726.96Pa
Connector	-	-	4pin PWM	4pin PWM
Overall Dimension (H/W/D)	27x70x106mm	27x82x106mm	27.8x90x90mm	100x80x30mm
Weight	390g	410g	435g	430g
Article Number	88885208	88885216	88885171	88885210
EAN-Code	4260133124844		4260133124059	4260133124868
Note	Shin-Etsu G751 Pre-Printed Backplate / Back Strips is not included	Shin-Etsu G751 Pre-Printed Backplate / Back Strips is not included	-	Shin-Etsu G751 Pre-Printed Backplate / Back Strips is not included

¹56x94mm mounting pitch
²80x80mm mounting pitch

CPU-Cooler	R-16	R-18	R-25	R-8
Picture				
Socket	LGA2011 (Square Type ²)	LGA2011 (Square Type ²)	LGA2011 (Narrow Type ¹)	LGA2011 (Square Type ²)
Processor	Intel® Sandy Bridge EP/EX processors*	Intel® Sandy Bridge E/EP processors*	Intel® Sandy Bridge ES-2600 & 4600 processors*	Intel® Sandy Bridge E/EP processors*
	*supports CPUs up to TDP 150W	*supports CPUs up to TDP 95W	*supports CPUs up to TDP 160W	*supports CPUs up to TDP 130W
Solution	1U Server	1U Server	1U Server	2U & Up Server
Type	Active	Active	Active	Passive
Material	Vapor chamber with copper stacked fin	Copper	Vapor chamber with copper stacked fin	Copper vapor chamber with aluminium stacked fin
Fan Dimension (H/W/D)	15x80x80mm	15x80x80mm	15x80x80mm	-
Fan Speed	At Duty Cycle 20%: 1000RPM At Duty Cycle 50%: 3500RPM At Duty Cycle 100%: 6000RPM	At Duty Cycle 20%: 1000RPM At Duty Cycle 50%: 3500RPM At Duty Cycle 100%: 6000RPM	At Duty Cycle 20%: 1000RPM At Duty Cycle 50%: 3500RPM At Duty Cycle 100%: 6000RPM	-
Bearing	2x Ball Bearing	2x Ball Bearing	2x Ball Bearing	-
Rated Voltage	12V	12V	12V	-
Power	At Duty Cycle 20%: 0.6W At Duty Cycle 50%: 3.84W At Duty Cycle 100%: 14.4W	At Duty Cycle 20%: 0.6W At Duty Cycle 50%: 3.84W At Duty Cycle 100%: 14.4W	At Duty Cycle 20%: 0.6W At Duty Cycle 50%: 3.84W At Duty Cycle 100%: 19.2W	-
Air Flow	At Duty Cycle 20%: 11.05cbm/h At Duty Cycle 50%: 19.04cbm/h At Duty Cycle 100%: 32.47cbm/h	At Duty Cycle 20%: 11.043cbm/h At Duty Cycle 50%: 19.028cbm/h At Duty Cycle 100%: 32.45cbm/h	At Duty Cycle 20%: 11.05cbm/h At Duty Cycle 50%: 19.03cbm/h At Duty Cycle 100%: 32.45cbm/h	-
Noise Level	At Duty Cycle 20%: 21.5dBA At Duty Cycle 50%: 43.0dBA At Duty Cycle 100%: 55.8dBA	At Duty Cycle 20%: 21.5dBA At Duty Cycle 50%: 43dBA At Duty Cycle 100%: 55.8dBA	At Duty Cycle 20%: 21.5dBA At Duty Cycle 50%: 43dBA At Duty Cycle 100%: 55.8dBA	-
Air Pressure	At Duty Cycle 20%: 22.26Pa At Duty Cycle 50%: 182.01Pa At Duty Cycle 100%: 534.46Pa	At Duty Cycle 20%: 22.26Pa At Duty Cycle 50%: 182.01Pa At Duty Cycle 100%: 534.46Pa	At Duty Cycle 20%: 22.26Pa At Duty Cycle 50%: 182.01Pa At Duty Cycle 100%: 534.46Pa	-
Connector	4pin PWM	4pin PWM	4pin PWM	-
Overall Dimension (H/W/D)	110x91x91mm	27.7x90x90mm	27.5x84x106mm	64x90x90mm
Weight	280g	420g	415g	580g
Article Number	88885205	88885177	88885252	88885174
EAN-Code	4260133124813	4260133124202		4260133124080
Note	Shin-Etsu G751 Pre-Printed Backplate / Back Strips is not included	Shin-Etsu G751 Pre-Printed Backplate / Back Strips is not included	Shin-Etsu G751 Pre-Printed Backplate / Back Strips is not included	

¹56x94mm mounting pitch
²80x80mm mounting pitch

CPU-Cooler	R-10	R-22	R-23	R-5
Picture				
Socket	LGA2011 (Square Type ²)	LGA2011 (Narrow Type ¹)	LGA2011 (Narrow Type ¹)	LGA2011 (Square Type ²)
Processor	Intel® Sandy Bridge EP/EX processors	Intel® Sandy Bridge EP/EX processors	Intel® Sandy Bridge EP/EX processors (E5-1600, E5-2600, E5-4600)*	Intel® Sandy Bridge E/EP und Intel® Haswell processors*
Solution	2U Server	2U Server	2U & Up Server	2U & Up Server
Type	Passive	Passive	Passive	Active
Material	aluminium stacked fin	Copper base with aluminium stacked fin	Copper vapour chamber with copper stacked fin	HCC (Heatpipes Contact CPU) copper base with aluminium fin
Fan Dimension (H/W/D)	-	-	-	25x60x60mm
Fan Speed	-	-	-	At Duty Cycle 20%: 1600RPM At Duty Cycle 50%: 4000RPM At Duty Cycle 100%: 8000RPM
Bearing	-	-	-	2x Kugelgelagert
Rated Voltage	-	-	-	12V
Power	-	-	-	At Duty Cycle 20%: 0.6W At Duty Cycle 50%: 1.8W At Duty Cycle 100%: 7.2W
Air Flow	-	-	-	At Duty Cycle 20%: 14.866cbm/h At Duty Cycle 50%: 37.179cbm/h At Duty Cycle 100%: 74.329cbm/h
Noise Level	-	-	-	At Duty Cycle 20%: 16.85dBA At Duty Cycle 50%: 35.94dBA At Duty Cycle 100%: 51dBA
Air Pressure	-	-	-	At Duty Cycle 20%: 6.86Pa At Duty Cycle 50%: 43.35Pa At Duty Cycle 100%: 179.58Pa
Connector	-	-	-	4pin PWM
Overall Dimension (H/W/D)	64x90x90mm	64x80x106mm	62x82x106mm	66x91.5x91.5mm
Weight	440g	470g	380g	595g
Article Number	88885206	88885209	88885215	88885172
EAN-Code	4260133124820	4260133124851		4260133124066
Note			Shin-Etsu G751 Pre-Printed Backplate / Back Strips is not included	Shin-Etsu G751 Pre-Printed Backplate / Back Strips is not included

¹56x94mm mounting pitch
²80x80mm mounting pitch

CPU-Cooler	R-9	R-14	R-24	R-17
Picture				
Socket	LGA2011 (Square Type ²)	LGA2011 (Narrow Type ¹)	LGA2011 (Narrow Type ¹)	LGA2011 (Square Type ²)
Processor	Intel® Sandy Bridge EP/EX processors*	Intel® Sandy Bridge Romley-E/EP Narrow ILM processors*	Intel® Sandy Bridge Romley-EP/EX Narrow ILM processors*	Intel® Sandy Bridge Romley-E/EP ILM processors*
	*supports CPUs up to TDP 95W	*supports CPUs up to TDP 150W	*supports CPUs up to TDP 160W	*supports CPUs up to TDP 160W
Solution	2U & Up Server	2U & Up Server	2U	Desktop, Workstation, 3U & Up Server
Type	Active	Active	Active	Active
Material	Aluminum extruded radial fin heatsink with copper inserted	Copper Base with stacked fins	Aluminum stacked fin with heatpipes directly contact CPU	Aluminum stacked fin with heatpipes directly contact CPU
Fan Dimension (H/W/D)	20x70x70mm	28x60x60mm	28x60x60mm	25x92x92mm
Fan Speed	At Duty Cycle 20%: 1000RPM At Duty Cycle 50%: 2500RPM At Duty Cycle 100%: 4500RPM	At Duty Cycle 20%: 1500RPM At Duty Cycle 50%: 3500RPM At Duty Cycle 100%: 7000RPM	At Duty Cycle 20%: 1500RPM At Duty Cycle 50%: 3500RPM At Duty Cycle 100%: 7000RPM	At Duty Cycle 20%: 1000RPM At Duty Cycle 50%: 1800RPM At Duty Cycle 100%: 2500RPM
Bearing	2x Ball Bearing	2x Ball Bearing	2x Ball Bearing	2x Ball Bearing
Rated Voltage	12V	12V	12V	12V
Power	At Duty Cycle 20%: 0.84W At Duty Cycle 50%: 1.44W At Duty Cycle 100%: 6.0W	At Duty Cycle 20%: 0.6W At Duty Cycle 50%: 2.16W At Duty Cycle 100%: 7.2W	At Duty Cycle 20%: 0.6W At Duty Cycle 50%: 2.16W At Duty Cycle 100%: 7.2W	At Duty Cycle 20%: 0.96W At Duty Cycle 50%: 1.44W At Duty Cycle 100%: 3W
Air Flow	At Duty Cycle 20%: 17.2cbm/h At Duty Cycle 50%: 43.01cbm/h At Duty Cycle 100%: 77.45cbm/h	At Duty Cycle 20%: 14.951cbm/h At Duty Cycle 50%: 34.489cbm/h At Duty Cycle 100%: 68.807cbm/h	At Duty Cycle 20%: 14.96cbm/h At Duty Cycle 50%: 34.51cbm/h At Duty Cycle 100%: 68.85cbm/h	At Duty Cycle 20%: 29.46cbm/h At Duty Cycle 50%: 53.024cbm/h At Duty Cycle 100%: 73.666cbm/h
Noise Level	At Duty Cycle 20%: 13.14dBA At Duty Cycle 50%: 33.04dBA At Duty Cycle 100%: 45.9dBA	At Duty Cycle 20%: 16dBA At Duty Cycle 50%: 32.9dBA At Duty Cycle 100%: 47.5dBA	At Duty Cycle 20%: 16dBA At Duty Cycle 50%: 32.9dBA At Duty Cycle 100%: 47.5dBA	At Duty Cycle 20%: 17dBA At Duty Cycle 50%: 24.78dBA At Duty Cycle 100%: 31.92dBA
Air Pressure	At Duty Cycle 20%: 1.81Pa At Duty Cycle 50%: 11.34Pa At Duty Cycle 100%: 36.74Pa	At Duty Cycle 20%: 6.86Pa At Duty Cycle 50%: 35.3Pa At Duty Cycle 100%: 140.24Pa	At Duty Cycle 20%: 6.86Pa At Duty Cycle 50%: 35.3Pa At Duty Cycle 100%: 140.24Pa	At Duty Cycle 20%: 4.71Pa At Duty Cycle 50%: 15.2Pa At Duty Cycle 100%: 29.42Pa
Connector	4pin PWM	4pin PWM	4pin PWM	4pin PWM
Overall Dimension (H/W/D)	62x90x90mm	102x67x70mm	110x91x91mm	110x91x91mm
Weight	490g	680g	420g	540g
Article Number	88885207	88885184	88885185	88885185
EAN-Code	4260133124837	4260133124295	4260133124387	4260133124387
Note	Shin-Etsu G751 Pre-Printed Backplate / Back Strips is not included	Shin-Etsu G751 Pre-Printed Backplate / Back Strips is not included	Shin-Etsu G751 Pre-Printed Backplate / Back Strips is not included	Shin-Etsu G751 Pre-Printed Backplate / Back Strips is not included
				¹ 56x94mm mounting pitch ² 80x80mm mounting pitch