ZM-NBF47

1. Features
1) The ZM-NBF47 does not need electrical power, for it is a fanless Northbridge cooler that operates without noise or vibration.
2) It cools the Northbridge chipset to its optimal temperature in absolute silence.

2. Components
1) ZM-NBF47 Heatsink
2) Thermal Grease
3) Two Bolts
4) Two Nuts
5) Two Links
6) Two Push Pin Assemblies
7) Two Clips

3. Heatsink Specifications
1) Dimensions : 81(L) X 37(W) X 47(H) mm
2) Heatsink Material : Pure Aluminum
3) Weight : 57g

4. Compatible Northbridge Chipsets
Compatible with Northbridge chipsets that have mounting holes or loops on the motherboard.
✳ The use of ZM-NBF47 with any of the following CPU coolers will provide a more stable and noiseless PC environment : **CNPS7000 Series, CNPS7700 Series, CNPS8000 Series, CNPS9500 Series**

5. Precautions
1) Check the components list and condition of the product before installation. If any problem is found, contact your place of purchase to obtain a replacement/refund.
2) Do not use the ZM-NBF47 if there are no mounting holes or loops present around the Northbridge chipset.
3) If the enclosed Push Pins (hole diameter: 3mm) do not fit, then use the Push Pins already installed on the motherboard instead.
4) Do not use the ZM-NBF47 if it interferes with any component of the motherboard.
5) Keep and use the product away from the reach of children.
6) Thermal grease should not come in contact with skin or eyes. In case of contact, flush the contacted area with water and get medical attention if irritation persists. Do not touch or ingest the thermal grease with mouth. If ingested, do not induce vomiting. Rinse mouth and seek medical attention.

Disclaimer) Zalman Tech Co., Ltd. is not responsible for any damages due to external causes, including but not limited to, improper use, problems with electrical power, accident, neglect, alteration, repair, improper installation, and improper testing.

6. Installation Procedure

[Installation on Mounting Holes]
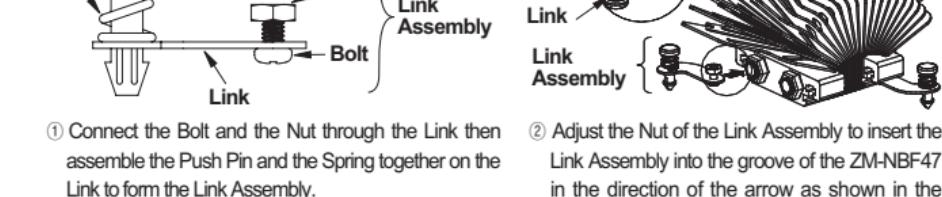
① Connect the Bolt and the Nut through the Link then assemble the Push Pin and the Spring together on the Link to form the Link Assembly.
✳ The end of the Spring with the smaller diameter should be directing towards the head of the Push Pin as illustrated in the picture.

② Adjust the Nut of the Link Assembly to insert the Link Assembly into the groove of the ZM-NBF47 in the direction of the arrow as shown in the picture.
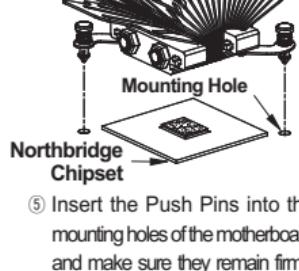
③ Align the Push Pins with the motherboard's mounting holes, then fasten the bolts tightly with a screw driver.

④ Remove any dust or residue on the surface of the Northbridge chipset, and apply an even layer of the enclosed thermal grease on the surface of the chipset that makes contact with the heatsink.
✳ Thermal grease MUST be used.

⑤ Insert the Push Pins into the mounting holes of the motherboard and make sure they remain firmly in place.

[Installation on Loops]
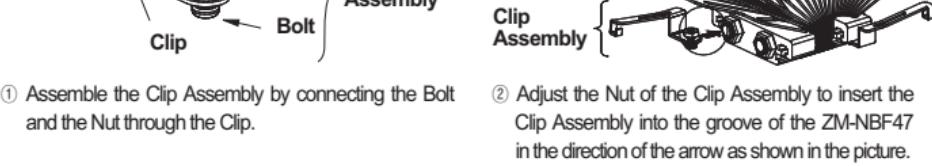
① Assemble the Clip Assembly by connecting the Bolt and the Nut through the Clip.

② Adjust the Nut of the Clip Assembly to insert the Clip Assembly into the groove of the ZM-NBF47 in the direction of the arrow as shown in the picture.
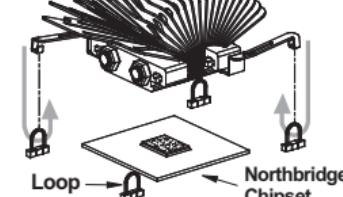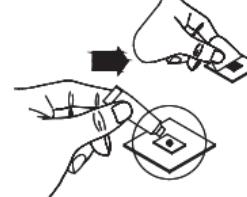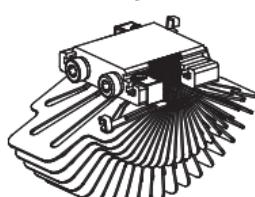
③ Align the Clips with the motherboard's loops, then fasten the bolts tightly with a screw driver.

④ Remove any dust or residue on the surface of the Northbridge chipset, and apply an even layer of the enclosed thermal grease on the surface of the chipset that makes contact with the heatsink.
✳ Thermal grease MUST be used.

⑤ Hook the Clips into the loops and make sure they remain firmly in place.
✳ Be sure to hook the Clip into the middle of the loop.

✳ CNPS (Computer Noise Prevention System) is a registered trademark of Zalman Tech Co., Ltd.
✳ The specifications of any product may change without prior notice to improve its performance.