



# APPROVAL SHEET

## CPU Coolers

SALES MODEL NO: SP805S3

ENGINEER NO: SC805S3-095-RM302



|                                                                                                 |                   |
|-------------------------------------------------------------------------------------------------|-------------------|
| <b>Article No. : SP-AP-SC-A621</b><br><b>Issue Date : June 2 , 2009</b><br><b>Version : A/0</b> | <b>Audited by</b> |
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## Approval Sheet Revisement Record

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| Version | Revised Chapter | Description   | Revised Date | Drafted by | Audited by | ECN No. |
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| A/0     | N/A             | First Version | 2009-6-2     |            |            | N/A     |
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## **1. Main Components List**

| <b>Item</b> | <b>Components</b> | <b>Part No.</b> | <b>Quantity</b> | <b>Material</b> |
|-------------|-------------------|-----------------|-----------------|-----------------|
| 1           | Heat sink         | 01AL805AW1      | 1               | AL              |
| 2           | Clip              | 03CM048         | 1               | Metal           |
| 3           | Screw             | 03SW067         | 4               | Metal           |
| 4           | Fan               | SF09025SRM302   | 1               | Plastic         |

## 2. Multi views and images

### 2.1 Cooler images



Picture 1 : Full view



Picture 2 : Top view

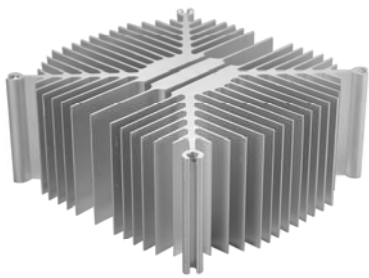


Picture 3 : Base view



Picture 4 : Side view

## 2.2 Components images



Picture 1 : Heatsink



Picture 2: Screw



Picture 3: Fan



Picture 4: Clip



Picture 5: Fan Label



Picture 6: 3 Pin connector



### 3. Features and Specifications:

#### Main features:

Supports all new AMD K8 & AM2+AM3 micro-processors

Ø90x25mm sleeve fan for silent operation

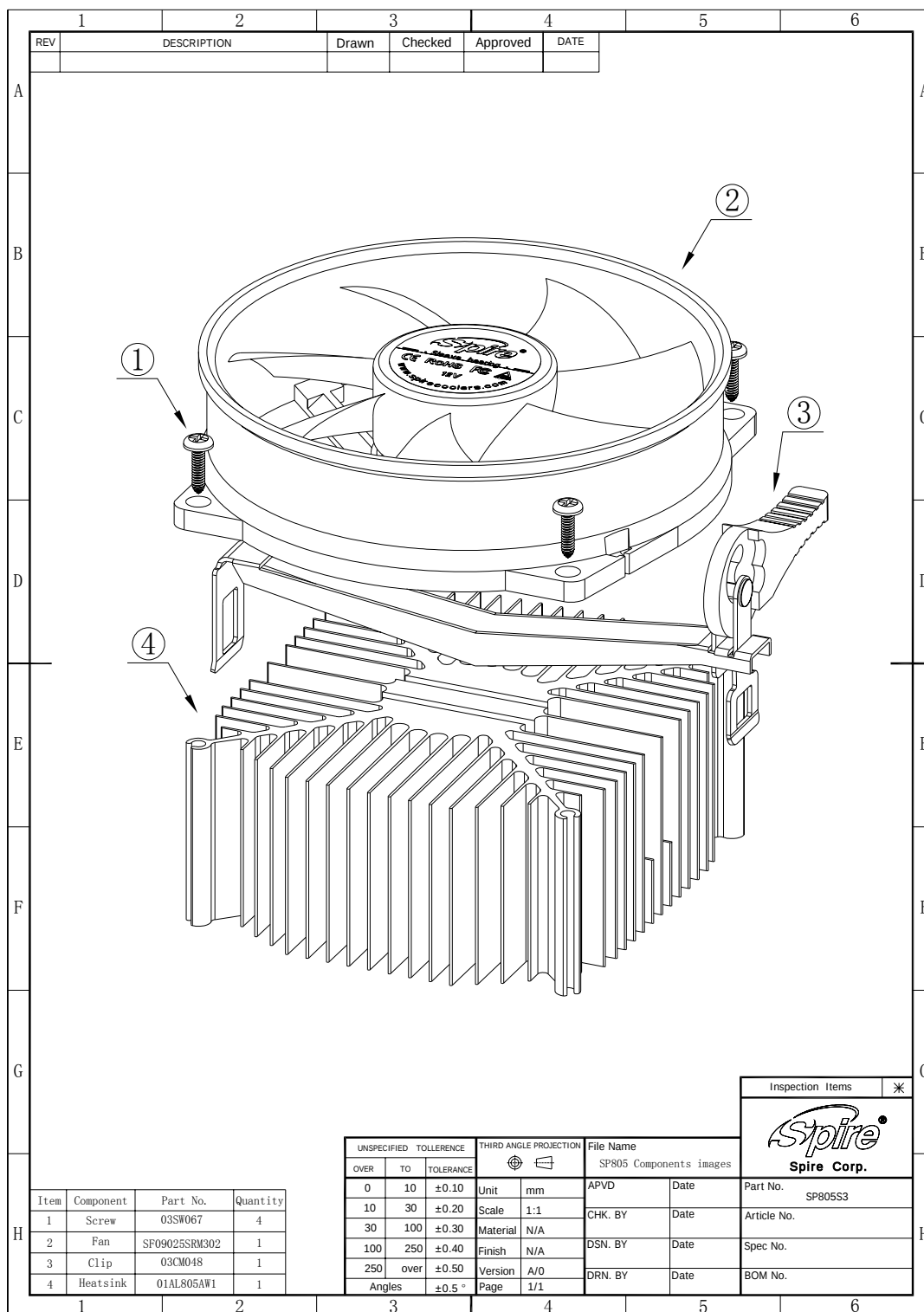
High-density extruded heat-sink with large base for optimal heat conductivity

#### Specifications:

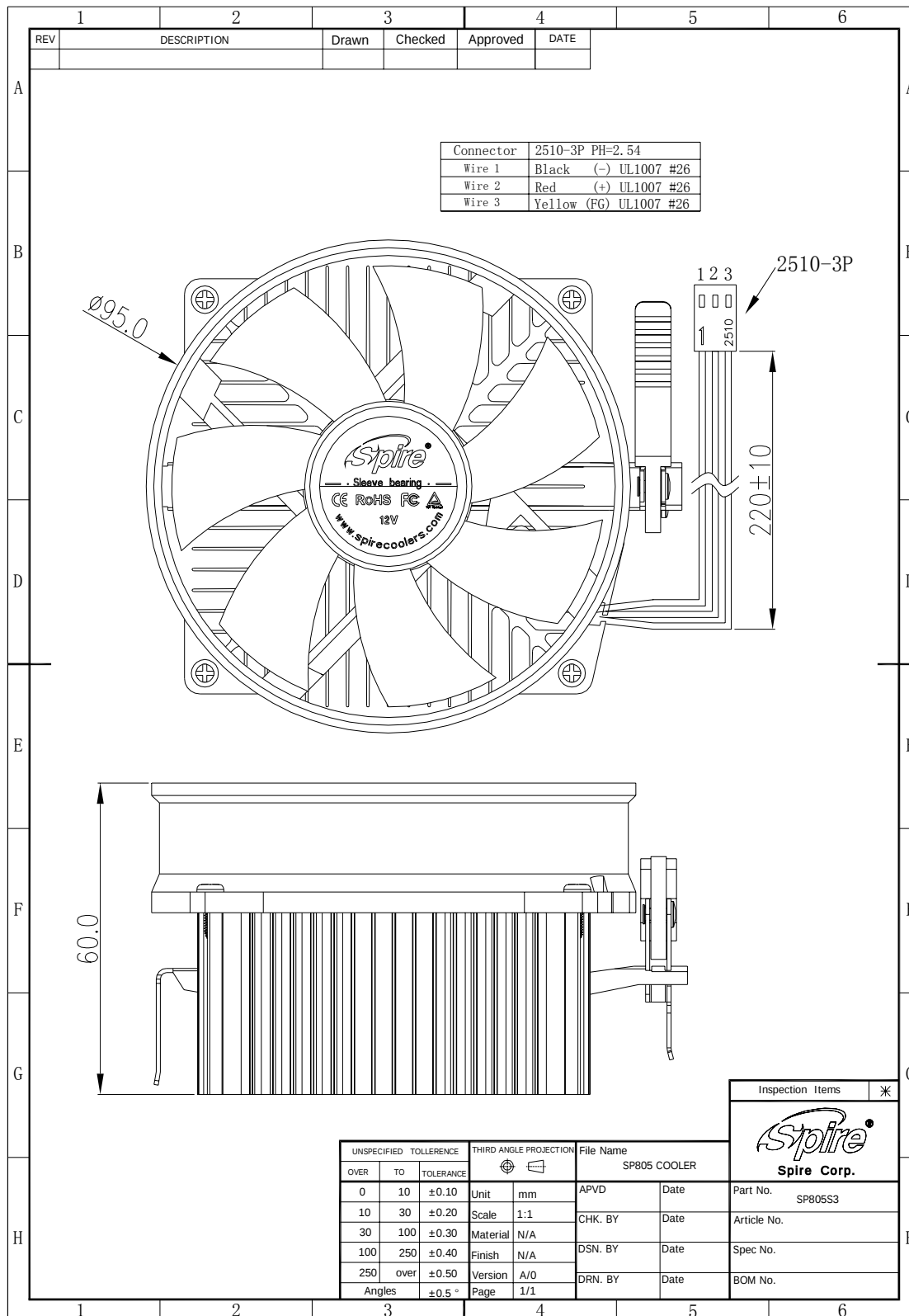
|                    |                         |                                                                                                                                                                                      |                                                                                                                                                                       |
|--------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimensions         | Heat sink : 77X85X34 mm |                                                                                                                                                                                      |                                                                                                                                                                       |
|                    | 12VDC Fan : Ø 95x25mm   |                                                                                                                                                                                      |                                                                                                                                                                       |
| Bearing            | Sleeve Bearing          |                                                                                                                                                                                      |                                                                                                                                                                       |
| Rated speed        | Cooler                  | 2400 RPM +/-10%                                                                                                                                                                      |                                                                                                                                                                       |
|                    | Only fan                | 2300 RPM +/-10%                                                                                                                                                                      |                                                                                                                                                                       |
| Rated power        | 1.92 W                  |                                                                                                                                                                                      |                                                                                                                                                                       |
| Noise level        | 26.0 dBA                |                                                                                                                                                                                      |                                                                                                                                                                       |
| Air flow           | 46.46CFM                |                                                                                                                                                                                      |                                                                                                                                                                       |
| Current            | 0.16A +/-0.02           |                                                                                                                                                                                      |                                                                                                                                                                       |
| Life hours         | Sleeve: 30,000          |                                                                                                                                                                                      |                                                                                                                                                                       |
| Connector          | 3 pin, main board       |                                                                                                                                                                                      |                                                                                                                                                                       |
| Application        | AMD:                    | Phenom X4 9100e<br>Phenom X3 8450e<br>Phenom X3 8250e<br>Athlon 64 X2 5200+ EE<br>Athlon 64 X2 5000+<br>Athlon 64 X2 4800+<br>Athlon 64 X2 4400+<br>Athlon XP 3500+<br>Sempron 3400+ | Opteron X2 870 HE<br>Opteron X2 860 HE<br>Opteron X2 270 HE<br>Opteron X2 865 HE<br>Opteron X2 260 HE<br>Athlon 64 X2 4600+ EE<br>Athlon 64 X2 4000+<br>Sempron 3600+ |
| Thermal resistance | 0.347°C/W               |                                                                                                                                                                                      |                                                                                                                                                                       |
| TDP                | 95W                     |                                                                                                                                                                                      |                                                                                                                                                                       |
| Thermal type       | Stars-350white grease   |                                                                                                                                                                                      |                                                                                                                                                                       |
| weight             | 238g(Cooler only)       |                                                                                                                                                                                      |                                                                                                                                                                       |

## 4. Product Drawing

### 4.1 Assembly Drawing



## 4.2 Cooler





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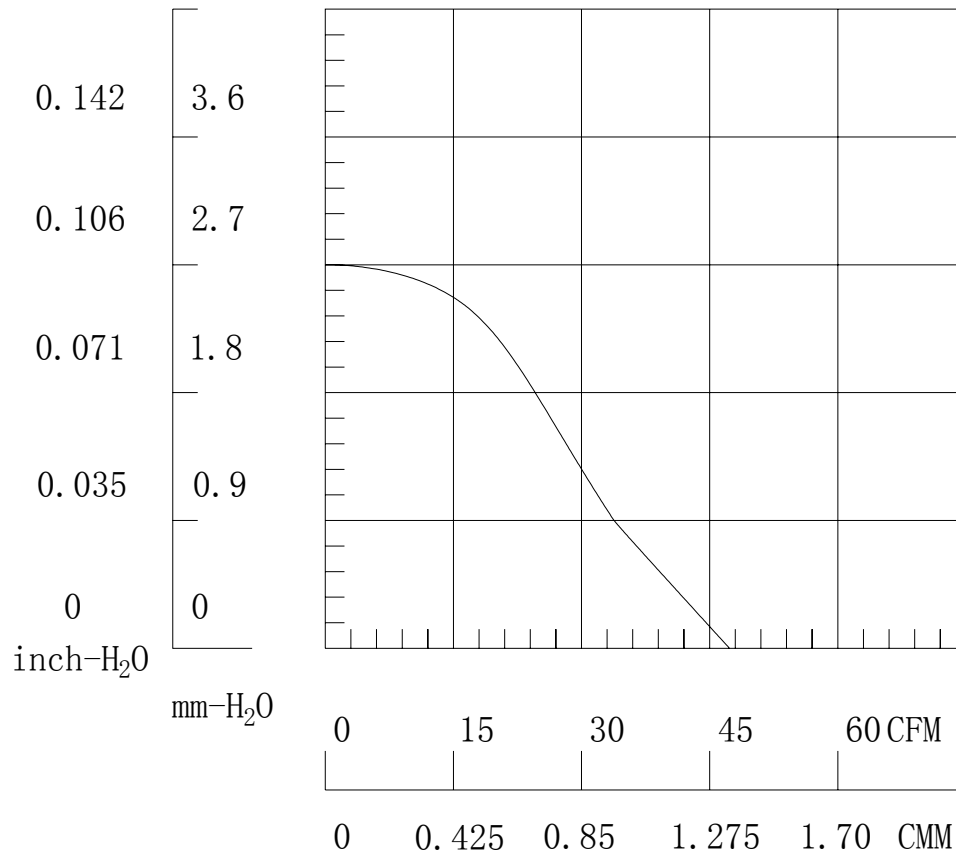
## 5. Fan Specification:

### FAN MODEL: SF09025SRM302

|                            |                            |
|----------------------------|----------------------------|
| 1) Rated Voltage           | : 12VDC                    |
| 2) Operating Voltage Range | : 10.2 ~13.8VDC            |
| 3) Rated Speed (only fan)  | : 2300RPM ±10%             |
| 4) Static Pressure         | : 2.11 mm-H <sub>2</sub> O |
| 5) Air Flow                | : 46.46 CFM                |
| 6) Rated Current           | : 0.16 A +/-0.02           |
| 7) Rated Power             | : 1.92WATTS                |
| 8) MAX Noise Level         | : 26.0 dB(A)               |
| 9) Operating Temperature   | : -10 to 70 °C             |
| 10) Storage Temperature    | : -40 to 70 °C             |
| 11) Bearing System         | : Sleeve Bearing           |
| 12) Connector              | : 3 pin                    |
| 13) Weight                 | : 64.0g                    |



## 6. P&Q Characteristic curves





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**7. Correlative Certification compliance**

| Item # | Certification type | Certification Number | Certification listing                                      | Remark |
|--------|--------------------|----------------------|------------------------------------------------------------|--------|
| 1      | EMC                | BCT07LC-807E         | <a href="http://www.bontek.com.cn">www.bontek.com.cn</a>   |        |
| 2      | LVD                | BCT07LC-807S         | <a href="http://www.bontek.com.cn">www.bontek.com.cn</a>   |        |
| 3      | FCC                | ASZ08041007FK        | <a href="http://www.aovt.com">www.aovt.com</a>             |        |
| 4      | ROHS               | GZ0803038947A/CHEM   | <a href="http://www.rohs.cn.com">www.rohs.cn.com</a>       |        |
| 5      | TUV                | R50131773            | <a href="http://www.sz.chn.tuv.com">www.sz.chn.tuv.com</a> |        |



RoHS Declaration of Conformity

**Spire Corp.**

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Spire hereby declares under our sole responsibility that the product:

Part number: **SP805S3**

Codename: **CoolReef Pro**

Description: Extruded heat-sink with large base for optimal heat

conductivity; Sleeve bearing fan for silent operation ;

2400rpm 3pin, Mainboard ; AMD CPU Cooler .



Is tested and approved in compliance with the EUROPEAN COUNCIL ROHS DERECTIVE.

(Restriction of Hazardous Substances) which will restrict the use of certain substances in electrical and electronic products: including lead (Pb), mercury, cadmium, hexavalent chromium, and certain halide-containing flame retardants. The directive applies to all electrical and electronic products, their component parts that are placed on the market after July 1, 2006.

*Spire Coolers Corp.*

**PM Engineering Dept.**

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**Buji, Shenzhen**