

## AM2CPU Board Specifications

<b>Platform:</b>	7.8-in x 5.65-in (19.8 cm x 14.4 cm)
<b>CPU:</b>	940-Pin AM2 Socket Supporting AMD Athlon™ 64 / 64FX / 64X2 and Sempron™ Processors Supports AMD's Cool 'n' Quiet™ Technology
<b>FSB:</b>	Hyper Transport 1000 MHz
<b>Memory:</b>	4 x DDRII DIMM Slots: DDRII_1, DDRII_2, DDRII_3, and DDRII_4 Support DDRII800 / 667 / 533, Max. Total Memory Size 8GB <b>Dual Channel Memory Technology Support</b>

### NOTE

**AM2CPU Board** provides four 240-pin DDRII (Double Data Rate) DIMM slots, and supports Dual Channel Memory Technology. For dual channel configuration, you always need to install **identical** (the same brand, speed, size and chip-type) DDRII DIMM pair in the slots of the same color. In other words, you have to install **identical** DDRII DIMM pair in **Dual Channel A** (DDRII\_1 and DDRII\_2; Yellow slots) or **identical** DDRII DIMM pair in **Dual Channel B** (DDRII\_3 and DDRII\_4; Orange slots), so that Dual Channel Memory Technology can be activated. It also allows you to install four DDRII DIMMs for dual channel configuration, and please install **identical** DDRII DIMMs in all four slots. Please note that only the DRAM configuration according to the Allowed DRAM Configurations Table below is workable. **Do not make any DRAM configuration that is not listed on the Allowed DRAM Configurations Table.**

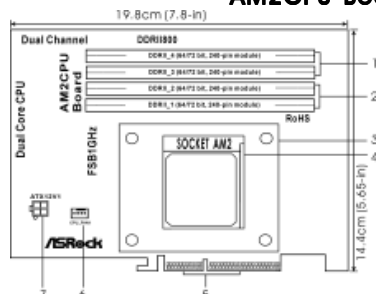
### Allowed DRAM Configurations

Data Bus	DIMM Configuration			
	DDRII_1 (Yellow)	DDRII_2 (Yellow)	DDRII_3 (Orange)	DDRII_4 (Orange)
64 bit (single channel)	Single Side	N/A	Empty	N/A
	Double Side	N/A	Empty	N/A
	Empty	N/A	Single Side	N/A
	Empty	N/A	Double Side	N/A
	Single Side	N/A	Single Side	N/A
	Single Side	N/A	Double Side	N/A
	Double Side	N/A	Single Side	N/A
	Double Side	N/A	Double Side	N/A
128bit (dual channel)	Single Side	Single Side	Empty	Empty
	Double Side	Double Side	Empty	Empty
	Empty	Empty	Single Side	Single Side
	Empty	Empty	Double Side	Double Side
	Single Side	Single Side	Single Side	Single Side
	Single Side	Single Side	Double Side	Double Side
	Double Side	Double Side	Single Side	Single Side
	Double Side	Double Side	Double Side	Double Side



It is not allowed to install DDR DIMMs into DDRII slots; otherwise, this motherboard and DIMMs may be damaged.

### AM2CPU Board Layout



- 2 x 240-pin DDRII DIMM Slots (DDRII\_3-4, Dual Channel B, Orange Slots)
- 2 x 240-pin DDRII DIMM Slots (DDRII\_1-2, Dual Channel A, Yellow Slots)
- CPU Heatsink Retention Module
- 940-Pin AM2 CPU Socket
- Golden Finger
- CPU Fan Connector (CPU\_FAN1)
- ATX 12V Power Connector (ATX12V1)

## AM2CPU Board Installation

To install **AM2CPU Board** into the **Future CPU Port** on ASRock motherboards that support future CPU upgrade function (e.g. **K8Upgrade series motherboards**), please follow the steps below.

STEP 1: Install the AMD 940-pin AM2 CPU into **AM2CPU Board**, then install the CPU fan and heatsink into **AM2CPU Board**, and connect the CPU fan to the CPU fan connector (CPU\_FAN1).

**NOTE:** Though AM2CPU Board provides 4-Pin CPU fan (Quiet Fan) support, the 3-Pin CPU fan still can work successfully even without the fan speed control function. If you use a 4-Pin CPU fan on AM2CPU Board, the fan speed control function needs to depend on the motherboard support.



Pin1-3 Connected  
3-Pin Fan Installation



4-Pin Fan Installation

STEP 2: Install DRAM into **AM2CPU Board**.

STEP 3: If necessary, remove the CPU heatsink retention module from the ASRock motherboard that you are going to install **AM2CPU Board** into.

**NOTE:** Whether or not to remove the CPU heatsink retention module from the ASRock motherboard depends on the type of CPU fan installed on AM2CPU Board.

STEP 3-1: Place the ASRock motherboard with its backside up.

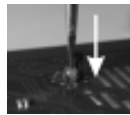
STEP 3-2: Use a flathead screwdriver to press down the WHITE fastener of the CPU heatsink retention module through the hole. Repeat with remaining fasteners.

STEP 3-3: Use a pair of pliers to clutch the BLACK supporting part of the CPU heatsink retention module, then press it down through the hole. Repeat with remaining supporting parts.

STEP 3-4: Place the ASRock motherboard with its backside down, then remove the loosened CPU heatsink retention module from the motherboard.



STEP 3-1



STEP 3-2



STEP 3-3



STEP 3-4

STEP 4: Adjust the jumper settings on ASRock motherboard to fit with the requirement for AMD 940-pin AM2 CPU installation. (See ASRock Motherboard User Manual for details).

STEP 5: Secure ASRock motherboard to the chassis.

STEP 6: Install **AM2CPU Board** into the **Future CPU Port** (a yellow slot) on ASRock motherboards that support future CPU upgrade function by aligning the golden finger of **AM2CPU Board** with the **Future CPU Port**.

**NOTE:** If you install AM2CPU Board and plan to install the AGP VGA card / PCI Express VGA card to the AGP slot / PCI Express slot nearby Future CPU Port, please do not choose the VGA card with the heatsink which is too thick to collide with AM2CPU Board. Otherwise, it may cause permanent damage to both your AM2CPU Board and VGA card!



STEP 7: Secure **AM2CPU Board** with the bracket to the chassis.

STEP 8: Ensure to connect the power supply with ATX 12V plug to the ATX 12V Power Connector (ATX12V1) on **AM2CPU Board**. Failing to do so will cause power up failure.



Please download the latest BIOS version of your motherboard from our website and install it to your system; otherwise, your motherboard may not support AM2CPU Board upgrade function. For the latest BIOS version, please visit our website for installation:  
<http://www.asrock.com>