

# A68N-2100 Motherboard



- On board AMD Fusion APU E1-2100 Dual-Core processor
- AMD Radeon HD8210 Graphics
- Supports USB 3.0
- Mini size (17\*17cm ) for flexible use
- Supports BIO-Remote 2 Technology
- Supports Charger Booster Technology

# A68N-2100 Specifcation

CPU	AMD Fusion APU E1-2100 Dual-Core Processor
MEMORY	Support DDR3 / DDR3L 1333/1066/800 MHz 2 x DDR3 DIMM Memory Slot Max. Supports up to 16GB Memory
INTEGRATED VIDEO	AMD Radeon™ HD8210 Graphics, On Board Graphic Max. Memory Share Up to 2GB Supports DX11.1 Supports HDCP
STORAGE	2 x SATA III Connector
LAN	Realtek RTL8111G - 10/100/1000Mb/s Controller
AUDIO CODEC	Realtek ALC662 6-Channel HD Audio
USB	2 x USB 3.0 Port 2 x USB 2.0 Port 2 x USB 2.0 Header
EXPANSION SLOT	1 x PCI-E 2.0 x16 Slot(x4)

REAR I/O	1 x PS/2 Mouse 1 x PS/2 Keyboard 2 x USB 3.0 Port 2 x USB 2.0 Port 1 x HDMI Connector 1 x VGA Port 1 x LAN Port 3 x Audio Jacks
INTERNAL I/O	2 x USB 2.0 Header 2 x SATA III Connector (6Gb/s) 1 x Front Audio Header 1 x Front Panel Header 1 x S/PDIF-Out Header 1 x CPU Fan Connector 1 x System Fan Connector 1 x COM Port Header 1 x Printer Port Header
H/W MONITORING	CPU / System Temperature Monitoring System Fan Monitoring System Voltage Monitoring
DIMENSION	Mini ITX Form Factor Dimension: 17cm x 17cm ( W x L )
OS SUPPORT	Supports Windows XP / 7 / 8 / 8.1 / 10(x64)
BUNDLE SOFTWARE	BIO-Remote2
ACCESSORIES	2 x SATA Cable 1 x I/O Shield 1 x DVD Driver 1 x Quick Guide
FEATURES	Windows 8 Ready Supports Solid capacitor BIO-FLASHER Supports Charger Booster Supports BIOS Online Update

# A68N-2100 OVERVIEW

**CPU-Chipset** 



# AMD Fusion APU E1-2100 Dual-Core Processor

This motherboard supports integrated AMD Dual-Core Processor E1-2100 with AMD Radeon™ HD 8210 Graphics. This revolutionary APU (Accelerated Processing Unit) combines processing power and advanced DirectX 11.1 graphics in one small, energy-efficient design to enable accelerated performance and an industry-leading visual experience. It features single-channel DDR3 1333 memory support and accelerates data transfer rate up to 2.5GT/s.

## Audio+



#### **HD** Audio

Provides high quality sound with minimal loss of audio fidelity.

#### Video+



#### DX11.1

Direct3D 11.1 enables Direct3D 10 APIs and Direct3D 11 APIs to use one underlying rendering device. And it allows developers to achieve a high speed, fully conformant software rasterizer.



# Integrated HDMI with HDCP

Onboard HDMI connector allows full video & audio support. It has industry-leading high definition video quality.

# Speed+



### **SmartSpeedLAN**

SmartSpeedLAN is a free software application which monitors and manages your PC's network behavior. With user-friendly GUI, it allows you to select and prioritize different types of network traffic, including gaming, media streaming, communications or web surfing. You can also set any specific applications, choosing to prioritize or block accordingly. SmartSpeedLAN can feature automatic management options that use adaptive networking intelligence to ensure that you are getting the best online experience possible.



#### **USB 3.0**

Experience Fastest data transfers at 5 Gbps with USB 3.0--the new latest connectivity standard. Built to connect easily with next-generation components and peripherals, USB 3.0 transfers data 10X faster and backward compatible with previous USB 2.0 components.



### **Charger Booster**

Charger booster is the best and efficient charger solution for apple devices such as iPad, iPhone. Basically, Charger booster Technology is able to boost the charging time to be more efficiency and faster once any apple goods connecting to our Motherboard. With charger booster technology, you are able to charge your apple devices up to 42 % faster.



#### SATAIII 6Gbps

SATAIII 6Gbps provides a higher bandwidth to retrieve and transfer HD media. With this super speed data transfer, SATAIII allows an incredible data boost which is 2x faster than the SATA II.



#### **Dual DDR3-1600**

It supports 2 or 4 DIMM Slots DDR3 memory that features data transfer rates of DDR3 1600/1333. The processor support 2 memory channels and setting the memory multiplier, allows selection of the channel speed. These clearly uplift the band width and boost the overall system performance.

#### Durable+



## Moistureproof of PCB

The popularity of PC usage and working environment is getting deteriorating and moist (rural, coastal, etc.). The PCB will be oxidizing easily by damp or absorbed moisture, and ionic migration or CAF (Conductive Anodic Filament) will be generated. Moisture-proof PCB meets high density and high reliability requirements for moisture proof.



#### Low RdsOn P-Pak MOS

Low resistance design can significantly reduce the current out of energy loss. Low temperature, small size, excellent thermal conductivity.



# X.D.C (eXtreme Durable Capacitors)

Biostar adopts low ESR and high ripple conductive solid state caps that provide sufficient, stable power supply to the CPU. The life span can also be more than 6.25 x of ordinary liquid caps.

## Protection+



#### **ESD Protection**

ESD (Electrostatic Discharge) is the major factor to destroy the PC by electrical overstress (EOS) condition. ESD occurred by PC users when touch any devices connect to a PC, which may result in damage to the motherboard or parts. ESD protection is designed to protect the motherboard and equipment from damage by EOS.



#### **USB Polyswitch**

On board dedicated power fuse to help prevent USB port failure. It prevents USB Port overcurrent and safe guard your system and device lifespan.





#### **BIOS Virus Protection**

When enabled, the BIOS will protect the boot sector and partition table by halting the system and flashing a warning message whether there's an attempt to write to these areas.



#### OC / OV / OH Protection

OC / OV / OH Protection design detects overvoltage conditions and prevents voltage surges from spreading in real time. It also actively cuts off the overvoltage supply to protect your system.



# BullGuard Internet Security (90 days FREE trial)

BullGuard Internet Security comes with the broadest line-up of internet security features on the market, including: a cutting-edge dual Antivirus engine, Online Backup for your precious files, PC Tune Up to speed up your system, a Game Mode for a seamless gaming experience, Parental Control, Firewall, Safe Browsing and many more. Make the most of your digital life with Bullguard!

### DIY+



#### **UEFI BIOS**

Unified Extensible Firmware Interface (UEFI) is a brand new framework that provides a revolutionary interface. It is a modern clear and easy-to-use graphical user interface. The UEFI comes with a colorful easy-understand icons leads users into the setup layer directly.



#### Header Zone

Users can easily assemble their own computer, a simple-swap data discs and other accessories.





BIO-Remote2 Technology is featuring users a better Home Theater environment. Users who own either Android mobile or Apple goods are able to access and control your PC remotely; At this moment, you're smart device became a intelligent and functional remote controller; more than that, BIO-Remote2 also includes both function of mouse pad and power point presentation mode.



#### **BIO-Flasher**

BIO-Flasher is a convenient BIOS update tool. Just launch this tool and put the BIOS on USB pen driver before entering the OS. You can update your BIOS with only a few clicks without preparing an additional floppy disk or other complicated flash utility.

\*The specification and pictures are subject to change without notice and the package contents may differ by area or your motherboard version!