

# A78MD Motherboard



- Supported Socket FM2+/FM2 processors AMD Aseries/ E2-series processor
- Supported AMD Mutil Core(x4,x2)
- AMD 100W processor support
- AMD A78 Chipset
- 2 DIMM supported DDR3-2600(OC)/ 2400(OC)/ 2133/ 1866/ 1600/ 1333/ 1066/ 800
- AMD Dual Graphics Technology

# A78MD Specifcation

CPU SUPPORT	AMD A10 Processor AMD A8 Processor AMD A6 Processor AMD A4 Processor AMD E2 Processor AMD Athlon <sup>™</sup> II X4 Processor Maximum CPU TDP (Thermal Design Power) : 100Watt
MEMORY	Support Dual Channel DDR3 2600(OC)/2400(OC)/2133/1866/1600/1333/1066/800 MHz 2 x DDR3 DIMM Memory Slot Max. Supports up to 32GB Memory
INTEGRATED VIDEO	By CPU model AMD Dual Graphics Technology Supports DX11.1
STORAGE	4 x SATA III Connector Support SATA RAID: 0,1,10
LAN	Realtek RTL8111G - 10/100/1000 Controller
AUDIO CODEC	Realtek ALC662 6-Channel HD Audio
USB	2 x USB 3.0 Port 1 x USB 3.0 Header 2 x USB 2.0 Port 2 x USB 2.0 Header

EXPANSION SLOT	1 x PCI-E 3.0 x16 Slot(supported by FM2+ CPU) 1 x PCI-E 2.0 x1 Slot
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 DVI (Dual Link) Connector 1 x VGA Port 1 x LAN Port 3 x Audio Jacks
INTERNAL I/O	1 x USB 3.0 Header 2 x USB 2.0 Header 4 x SATA III Connector (6Gb/s) 1 x Front Audio Header 1 x Front Panel Header 1 x CPU Fan Connector 1 x System Fan Connector 1 x COM Port Header
H/W MONITORING	CPU / System Temperature Monitoring CPU / System Fan Monitoring Smart / Manual CPU Fan Control System Voltage Monitoring
DIMENSION	Micro ATX Form Factor Dimension: 22.6cm x 17.4cm ( W x L )
OS SUPPORT	Supports Windows XP / 7 / 8 / 8.1 / 10(x64)
BUNDLE SOFTWARE	BIO-Remote2 Smart Speed LAN
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
A78MD OVERVIEW	
CPU-Chipset	





Audio+

## AMD A78 chipset

AMD® A78 chipset is designed to support up to 5GT/s interface speed and PCI Express  $^{\text{M}}$  3.0/2.0 graphics. It natively supports SATA 6Gb/s ports and USB 3.0 Ports.

#### FM2+ APU Support

Socket FM2+ is a new AMD CPU socket design that will support the yet to be released Steamroller core Kaveri APUs. The FM2+ has a slightly different pin configuration with two additional pin sockets, however FM2+ motherboards will retain backwards compatibility with previous generation Socket FM2 APUs. Socket FM2+ APUs possibly will not be compatible with Socket FM2 motherboards due to the aforementioned additional pins.

HD AUDIO	HD Audio Provides high quality sound with minimal loss of audio fidelity.
Video+	
	Dual-Link DVI A dual link doubles the number of TMDS pairs, effectively doubling video bandwidth at a given pixel clock frequency.
Graphics DXII.I	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.
Speed+	













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.

# PCIe 3.0

PCle 3.0 is the ubiquitous and general-purpose PCI Express I/O standard. At 8GT/s bit rate, the interconnect performance bandwidth is doubled over PCle 2.0, while preserving compatibility with software and mechanical interfaces.

## 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.



#### Moistureproof PCB

#### Low RdsOn P-Pak MOS



#### Protection+





#### **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.

## 5 Phase Power Phase Design

5-phase VRM design with high quality power components such as low RDS (on) Mosfet for lower temperature has the advantage to raise the overclocking ability.

#### **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.







## 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!









## **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-Remote 2**

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.

MX SUITE THE ALL-IN-ONE MEDIA SOLUTION	<b>MX SUITE</b> As an Biostar customer you can download MAGIX multimedia tools designed to enhance your music, videos and photos for free. From music and website creation to video editing and photo management. Four products that cover all of your multimedia needs. Simply do more with your media than you
BIOS FLASHER	ever thought possible. <b>BIO-Flasher</b> 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.
HOT	<b>eHot-Line Utiltiy</b> Integrated e-service automatically sends your technical support request to Biostar Globe tech support without any delay.
BIOSCREEN	BIOScreen Utility Personalize your desktop with customizable boot logo. BIOScreen is the new feature that lets you personalize and create your own style with unique, custom-made boot logo.

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