FM2A88X EXTREME4+

AMD A88X (Bolton-D4)

ASROCK

AMD A88X — FM2+ SOCKET
AMD A SERIES
AMD CROSSFIRE TECHNOLOGY
Windows Ready 8.1
HDMI — HIGH-DEFINITION MULTIMEDIA INTERFACE

Product Brief

· A-Style : Home Cloud
· Supports Socket FM2+ 95W / FM2 100W processors
· ASRock DuraCap
· Supports Dual Channel DDR3 2600+(OC)
· 1 x PCIe 3.0 x16, 1 x PCIe 2.0 x16, 2 x PCIe 2.0 x1, 3 x PCI
· Supports AMD Quad CrossFireX, CrossFireX and Dual Graphics
· Integrated AMD Radeon™ R7/R5 Series Graphics in A-series APU
· Multi-VGA Output Options : D-Sub, DVI-D, HDMI
· 7.1 CH HD Audio with Content Protection (Realtek ALC892 Audio Codec)
· TI® NE5532 Premium Headset Amplifier (Supports up to 600 ohm headsets)
· 7 x SATA3, 1 x eSATA, 8 x USB 3.0 (2 Front, 6 Rear), 8 x USB 2.0
· Supports A-Tuning, XFast 555, X-Boost, Easy Driver Installer, FAN-Tastic Tuning, USB Key

Home Cloud | FM2/FM2+ APU Support | ASRock DuraCap | PCI-E 3.0 | Triple Monitor | 4K/2K | X-Boost | XFast 555 | UEFI Tech Service

Detail Specification

Platform	- ATX Form Factor - ASRock DuraCap (2.5 x longer life time) (100% Japan-made high-quality conductive polymer capacitors)
A-Style	- Home Cloud
CPU	- Supports Socket FM2+ 95W / FM2 100W processors - 4 + 2 Power Phase design
Chipset	- AMD A88X (Bolton-D4)

Memory	- Dual Channel DDR3 Memory Technology
	- 4 x DDR3 DIMM Slots
	- Supports DDR3 2600+(OC)/2400(OC)/2133/1866/1600/1333/1066 non-ECC,
	  un-buffered memory
	  * DDR3 2600+ is only supported with two DIMMs.
	- Max. capacity of system memory: 64GB
	- Supports Intel® Extreme Memory Profile (XMP) 1.3 / 1.2
	- Supports AMD Memory Profile Technology (AMP) up to AMP 2400

Expansion Slot	- 1 x PCI Express 3.0 x16 Slot (PCIE2 @ x16 mode) * PCIE 3.0 is only supported with FM2+ CPU. With FM2 CPU, it only supports PCIE 2.0. - 1 x PCI Express 2.0 x16 Slot (PCIE4 @ x4 mode) - 2 x PCI Express 2.0 x1 Slots - 3 x PCI Slots - Supports AMD Quad CrossFireX™, CrossFireX™ and Dual Graphics

Graphics	- Integrated AMD Radeon™ R7/R5 Series Graphics in A-series APU
	- DirectX 11.1, Pixel Shader 5.0 with FM2+ CPU. DirectX 11, Pixel Shader 5.0 with FM2 CPU.
	- Max. shared memory 2GB
	- Three VGA output options: D-Sub, DVI-D and HDMI Ports
	- Supports Triple Monitor
	- Supports HDMI with max. resolution up to 4K × 2K (4096x2160) @ 24Hz
	  * Only FM2+ APU can support up to 4096x2160 resolution display via HDMI port
	- Supports Dual-link DVI-D with max. resolution up to 2560x1600 @ 60Hz
	- Supports D-Sub with max. resolution up to 1920x1200 @ 60Hz
	- Supports Auto Lip Sync, Deep Color (12bpc), xvYCC and HBR (High Bit Rate Audio)
	  with HDMI Port (Compliant HDMI monitor is required)
	- Supports Blu-ray Stereoscopic 3D with HDMI Port
	- Supports AMD Steady Video™ 2.0: New video post processing capability for automatic
	  jitter reduction on home/online video
	- Supports HDCP with DVI-D, HDMI and DisplayPort Ports
	- Supports Full HD 1080p Blu-ray (BD) playback with DVI-D, HDMI and DisplayPort Ports

Audio	- 7.1 CH HD Audio with Content Protection (Realtek ALC892 Audio Codec) - Premium Blu-ray Audio support - TI® NE5532 Premium Headset Amplifier (Supports up to 600 ohm headsets)
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Qualcomm® Atheros® AR8171 - Supports Qualcomm® Atheros® Security Wake On Internet Technology - Supports Wake-On-LAN - Supports Energy Efficient Ethernet 802.3az - Supports PXE
Rear Panel I/O	- 1 x PS/2 Mouse/Keyboard Port - 1 x D-Sub Port - 1 x DVI-D Port - 1 x HDMI Port - 1 x Optical SPDIF Out Port - 2 x USB 2.0 Ports - 1 x eSATA Connector - 2 x USB 3.0 Ports (AMD A88X (Bolton-D4)) - 4 x USB 3.0 Ports (Etron EJ188) - 1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED) - 1 x Clear CMOS Switch with LED - HD Audio Jacks: Rear Speaker / Central / Bass / Line in / Front Speaker / Microphone

Storage	- 7 x SATA3 6.0 Gb/s Connectors, support RAID (RAID 0, RAID 1, RAID 5 and RAID 10),NCQ, AHCI and Hot Plug
Connector	- 1 x IR Header - 1 x COM Port Header - 1 x Chassis Intrusion Header - 1 x TPM Header - 1 x Power LED Header - 2 x CPU Fan Connectors (1 x 4-pin, 1 x 3-pin) - 3 x Chassis Fan Connectors (1 x 4-pin, 2 x 3-pin) - 1 x Power Fan Connector (3-pin) - 1 x 24 pin ATX Power Connector - 1 x 8 pin 12V Power Connector - 1 x Front Panel Audio Connector - 3 x USB 2.0 Headers (Support 6 USB 2.0 ports) - 1 x USB 3.0 Header by AMD A88X (Bolton-D4) (Supports 2 USB 3.0 ports)
BIOS Feature	- 64Mb AMI UEFI Legal BIOS with GUI support - Supports "Plug and Play" - ACPI 1.1 Compliant wake up events - Supports jumperfree - SMBIOS 2.3.1 support - DRAM, VDDP, VDDR Voltage multi-adjustment
Support CD	- Drivers, Utilities, AntiVirus Software (Trial Version), CyberLink MediaEspresso 6.5 Trial, Google Chrome Browser and Toolbar, Start8 (30 days trial)
Unique Feature	- ASRock A-Tuning - ASRock Instant Boot - ASRock Instant Flash - ASRock APP Charger - ASRock XFast USB - ASRock XFast LAN - ASRock XFast RAM - ASRock Crashless BIOS - ASRock OMG (Online Management Guard) - ASRock Internet Flash - ASRock UEFI System Browser - ASRock UEFI Tech Service - ASRock On/Off Play Technology - ASRock Dehumidifier Function - ASRock Easy RAID Installer - ASRock Easy Driver Installer - ASRock Interactive UEFI - ASRock Fast Boot - ASRock X-Boost - ASRock Restart to UEFI - ASRock USB Key - ASRock FAN-Tastic Tuning - Hybrid Booster: - ASRock U-COP
Hardware Monitor	- CPU temperature sensing - Chassis temperature sensing - CPU Fan Tachometer - Chassis Fan Tachometer - CPU/Chassis Quiet Fan - CPU/Chassis Fan multi-speed control - CASE OPEN detection - Voltage monitoring: +12V, +5V, +3.3V, Vcore
OS	- Microsoft® Windows® 8.1 32-bit / 8.1 64-bit / 8 32-bit / 8 64-bit / 7 32-bit / 7 64-bit
Certifications	- FCC, CE, WHQL - ErP/EuP ready (ErP/EuP ready power supply is required)
Accessories	- Quick Installation Guide, Support CD, I/O Shield - 4 x SATA Data Cables

Home Cloud

This motherboard supports Security Wake On Internet Technology with the onboard Qualcomm® Atheros® LAN, so you can connect with your PC from anywhere in the world. You will be able to power your PC on or turn it off, monitor and take control of it remotely with another smartphone, tablet or computer.

Mail
Keep your stored mail near at hand whenever you need it.

Documents
Access or send files remotely anywhere.

TV
Watch your favorite local TV programs by connecting to your PC.

Multimedia
Stream your secret stash of vids, music and pics.
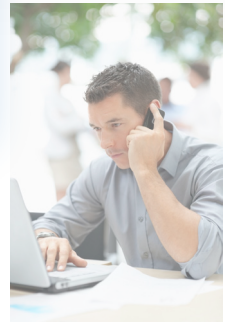
Home Cloud

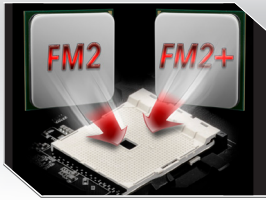*Remote Desktop Anytime, Anywhere*

Monitor
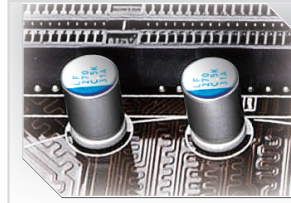Keep an eye on your pets or children when you are away from home.

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FM2/FM2+ APU Support

This motherboard is compatible with both AMD FM2 and FM2+ APUs. Please note that some new features may be only supported by FM2+ APUs.

ASRock DuraCap

ASRock DuraCaps feature 100% all solid Japan made high quality conductive polymer capacitors, which can extend the motherboard's lifespan up to 2.5 times longer.

Next-Gen PCIe 3.0

- Higher bit rate - 8.0GT/s
- Higher bandwidth per lane - 1GB/s
- Higher efficiency - 98.5% encoding efficiency
- 100% backward compatible with previous PCI-E 2.0 / 1.0 standard
  Note: PCI-E 3.0 supported with FM2+ APUs

4K/2K

4K is a new standard for display resolutions with a minimum of 3840 x 2160 pixels, which is twice the horizontal and vertical resolution of the 1080p format and four times as many pixels overall.

* Only FM2+ APU can support up to 4096 x 2160 resolution display via HDMI port.

A-Tuning

A-Tuning is ASRock's multi purpose software suite with a new interface, more new features and improved utilities, including XFast RAM, OC Tweaker and a whole lot more.

Triple Monitor

This motherboard supports Triple Monitor. You may choose up to three display interfaces to connect monitors and use them simultaneously.

TI NE5532 Premium Headset Amplifier

Premium Headset Amplifier uses TI® NE5532 which can deliver high definition audio for up to 600 ohm headphones.

X-Boost

Brilliantly designed for smart overclocking, ASRock X-Boost Technology is able to unleash the hidden powers of your CPU. Simply press "X" when turning on the PC, X-Boost will automatically overclock the relative components to get up to 15.77% performance boost!

XFast 555

ASRock's unique XFast 555 Technology (XFast RAM, XFast LAN, and XFast USB) allows users to experience 5 times performance boost in terms of system performance, LAN speed and USB transfer speed.
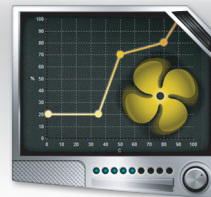
AMD Steady Video 2.0

Bringing the best video experience! Compared to v1.0, AMD Steady Video 2.0 provides more tech advances such as Letter/Pillar Boxed Content, Indicator Overlay, Enhanced Algorithm Effectiveness, etc.

USB Key

Just plug in the USB Key and let your computer log in to windows automatically without having to type your username and password!

FAN-Tastic Tuning

Configure different fan speeds for respective temperatures using the graph. The fans will automatically shift to the next speed level when the assigned temperature is met.

Easy Driver Installer

For users that don't have an optical disk drive to install the drivers from our support CD, Easy Driver Installer is a handy tool in the UEFI that installs the LAN driver to your system via an USB storage device, then downloads and