#### ASUS Introduces the ROG MAXIMUS VIII EXTREME/ASSEMBLY Motherboard

ROG-branded products always promise you absolute leading performance for those keen on winning power. Innovative user controls deliver true game-ruling innovation. Stylish gamer-focused design merges the excitement of gaming with a unique, premium style. The Republic of Gamers is committed to producing the most innovative hardcore PC performance hardware, enabling the ultimate computing experience for gamers and enthusiasts worldwide.

**Tagline: Assemble Maximus Wins.** 

25 Word Summary: The ROG MAXIMUS VIII EXTREME/ASSEMBLY takes Extreme a definitive step further, adopting the new ROG persona and including the new SupremeFX Hi-Fi USB DAC and ROG 10G Express Card.

50 Word Summary: Want for nothing. The ROG MAXIMUS VIII EXTREME/ASSEMBLY takes Extreme a definitive step further, adopting the new ROG persona and including the new SupremeFX Hi-Fi USB DAC and ROG 10G Express Card. The M8E/Assembly incorporates the latest connectivity both inside and out, fusing it with legendary overclocking capability and gaming features.

- Model Name: MAXIMUS VIII EXTREME/ASSEMBLY
- ETA: Now

• Web Link: <u>http://www.asus.com/us/Motherboards/MAXIMUS-VIII-EXTREME-ASSEMBLY/</u>

- Part Number: 90MB0LU1-M0AAY0
- UPC Code: 889349250983
- Box Dimension: 14.29 x 12.76 x 4.84 inches
- Gross Weight: 4.91 lbs.
- Quantity per Carton: 4 Pieces
- Warranty: 3 Year Warranty

# [MAXIMUS VIII EXTREME/ASSEMBLY]

### < Product Specification Summary >

- 5-way Optimization with 1-click overclocking
- SupremeFX Hi-Fi USB DAC + SupremeFX 2015 for unparalleled gaming audio
- ROG 10G Express Card + 3x3 802.11ac for the fastest possible networking
- RGB LED lighting for a customizable that fits your persona
- U.2 + M.2 + SATA Express for uncompromising storage speeds

## **Superior Specs**

• Intel LGA 1151

• Extreme Engine Digi+ MicroFine Alloy Chokes OptiMOS MOSFET 10K Black Metallic Capacitors

1 x HDMI 1.4b
1 x DisplayPort 1.2
4K/Ultra HD display support
3-display-output support

• 4 x USB 3.1 (10Gb/s) 3 x Type-A + 1 x Type-C

• Intel I219V LANGuard

• SupremeFX 2015 ESS ES9023P DAC 2VRMS Headphone Output NEC De-pop Relay Dedicated Clock

- 3 x PCIe 3.0 x16 slots (CPU) 1 x PCIe 3.0 x16 slot (PCH) 2 x PCIe 3.0 x1 slots (PCH)
- PRO CLOCK
- M.2 Socket 3 Type M PCIe Gen 3.0 x4 mode SATA mode
- ROG LOGO RGB LED

• 8 x SATA 6Gb/s (4 shared with SATA-E) 2 x SATA Express 1 x U.2

- 8 x USB 3.0 6 x USB 2.0
- DDR4 3866+ MHz (OC) 4 x DIMM, Dual Channel XMP Support
- Q-Code LED

### **REBELS THAT BREAK EVERY RULE**

To be ROG is to be the rebel. To be ROG is to break every rule. We are rebellious ROG, breaking our own rules to envision a new future. A future forged with striking distinction. ROG is red. ROG is black. And now ROG is also Plasma Copper: elite assemblies for elite gamers. This is our mark of invincibility — and your new emblem of dominance.

## GAMING AUDIO UPSCALED FOR FLAWLESS PERFECTION

#### SUPREMEFX HI-FI USB DAC/AMPLIFIER

ROG knows sound matters to gamers and streamers, and that's why we include a front-panel headphone amp that delivers sound exactly how the studio intended -

pure, unadulterated audio straight to your ears. The ESS® ES9018K2M digital-toanalog converter (DAC), dual Texas Instruments LM4562 op-amps and TPA6120A2 headphone amp work in harmony to faithfully reproduce every detail without distortion or jitter, so you enjoy audiophile-grade 32-bit/386kHz and DSD128 playback, and output of over 6VRMS to your favorite 6000hm headphones. SupremeFX Hi-Fi has a Cirrus Logic analog-to-digital convertor (ADC) for exceptional recording quality and, when you crave excitement over accuracy, fire up ROG's Sonic Studio suite to apply endless audio enhancements!

#### 1.ESS 9018K2M SABRE DAC:

The digital-to-analog converter with a high signal-to-noise ratio (SNR) and a digital volume control for the purest analog output.

#### 2.PREMIUM NICHICON & WIMA CAPACITORS:

The best components were chosen for every component in the analog stage to minimize distortion.

#### 3.LM4562 OUTPUT STAGE:

2 x LM4562 op-amps (one per channel) provide a clean stable volume boost and better channel separation.

#### 4.TPA6120 OUTPUT STAGE:

The TPA6120 headphone amp provides the final boost in volume allowing the amp to unlock the true potential of any headphones.

#### **5.SONIC SENSEAMP:**

Automatically detects and optimizes outputs for different headphone impedance (32-600 ohms).

#### 6.HIGH-PRECISION CLOCK SOURCE:

High-accuracy timing technology ensures ultra-low jitter by preventing fluctuating temperatures.

#### 7.DE-POP RELAY:

Dedicated relay eliminates the popping sound when the system is powered on or off, or devices are attached or removed.

### TURN UP TO 10G! - ROG 10G EXPRESS

#### **ULTRA-FAST TRANSFER SPEEDS:**

With PCI Express 2.0 x2 performance, you'll experience up to 10Gbit/s Ethernet speeds — up to 10X faster than other motherboards.

#### **EXTENSIVE COMPATIBILITY:**

10G Express runs at five different speed — 10Gbit/s, 5Gbit/s, 2.5Gbit/s, 1Gbit/s and 100Mbit/s.

#### **UPGRADE WITH NO EXTRA COST:**

10G Express runs up to 5Gbit/s on existing CAT5e cabling, so no need to spend money on replacements.

#### **FUTURE SPECIFICATION GUARANTEED:**

10G Express is compliant with the NBASE-T Alliance\* draft specification for 2.5Gbit/s and 5Gbit/s.

\* The NBASE-T Alliance includes many major network-infrastructure providers, including Cisco, Aquantia, Freescale, Intel, Qualcomm, Marvell and Xilinx, and exists to agree new 2.5Gbit/s and 5Gbit/s Ethernet standards. 10G Express is fully compliant to NBASE-T's draft specifications for future compatibility.

### **Best Gaming Performance**

Greater performance means smoother gameplay — and that means more chance to win. With the best overclocking (OC) design, UEFI BIOS and intuitive OC utility, you'll enjoy unmatched performance — coupled with an exclusive cooling design ensures your system never breaks a sweat.

#### One click overclock and cooling, done!

Get performance, efficiency, digital power, fan control, and even networking and audio tuning tailored for you – and the way you play!

You don't need to be an expert to max out gaming performance on your Maximus VIII Extreme build's gaming performance — because 5-Way Optimization sorts all the complex settings with a click, for instant, highly-controllable performance boosts! Our exclusive technology dynamically optimizes essential aspects of your system based on real-time use, so you get superb CPU performance, everyday energy savings, ultra-stable digital power, cool and quiet fans and even networking and audio settings that are tailored for the apps that you are using. In short, 5-Way Optimization ensures that your PC is perfect for gaming, entertainment, productivity or just about anything else!

- Games run swiftly and smoothly with high performance, prioritized bandwidth and vivid sound

- Fans stay whisper-quiet for everyday computing, and ensure extreme cooling efficiency when gaming

- Stutter is eliminated for smooth-running apps, even under heavy loading
- Energy waste is reduced so you'll save money

#### **CPU performance boost**

#### **CPU performance boost - TPU**

Unleash your PC's full performance with the ASUS AI Suite 3 utility! The TurboV Processing Unit (TPU) offers precise voltage control and advanced monitoring for the CPU and the graphics card. This gives you the freedom to adjust CPU frequencies and ratios for optimized performance and the ability to unlock the potential from your graphics card

#### All-round energy efficiency

#### All-round energy efficiency - EPU

With the Energy Processing Unit (EPU) you'll enjoy real-time, system-wide power savings. EPU detects and adjusts power consumption according to the PC's needs — automatically. It can also reduce CPU wattage to a set level and deliver even more savings with Away Mode. This creates an extreme energy-saving scenario by shutting down unused extra I/O controllers and reduces the graphics cards' power

level while you're away, so the PC consumes only the energy it needs — and not a drop more!

#### **Advanced fan controls**

Cooler by design - Fan Xpert 3

Advanced fan and water-pump controls for ultimate cooling and quietness with onboard thermal sensors and hardware-level 4-pin PWM/3-pin DC mode detection, Fan Xpert 3 makes sure every fan achieves the best balance of cooling performance and low noise!

Auto-Tuning Mode: Scans fan parameters, and all fans with a single click.

**Extreme Quite Mode:** Reduces CPU fan speed to below the default minimum, for extra-quiet operation and power savings during light loads.

**RPM Fixed Mode:** Lowers noise levels to near-0dB silence, allowing to you fix the fan speed.

**Precise Digital Power Control** 

#### Precise Digital Power Control - DIGI+ Power Control

Power control is one of the most essential motherboard designs. Intelligent CPUpower-draw detection with ASUS DIGI+ Power Control is an innovative, industryleading technology that fully complies with Intel® IMVP8 specifications, increasing overclocking potential, enhancing system stability, and improving power efficiency with superior flexibility and accurate control.

#### Game faster, rank higher

#### Accelerate your favorite apps and games with automated ease

ASUS-exclusive Turbo App's intuitive tuning panel boosts multiple hardware components to maximize gaming exhilaration, overclocking your CPU, tuning your fans, prioritizing network data and optimizing audio settings — all with automated ease. And now Turbo App is even more powerful than before, giving you the ability to connect to profiles previously set in Sonic Studio II and KeyBot II, so setup couldn't be simpler!

#### **OC Design-ASUS PRO Clock technology**

Thought you'd taken overclocking as far as it could go? Meet ASUS Pro Clock, a dedicated base-clock (BCLK) generator designed for 6th-generation Intel® processors that ramps BCLK frequencies up to 400MHz or even beyond\*. This custom solution works in tandem with the ASUS TurboV Processing Unit (TPU) to enhance voltage and base-clock overclocking control — providing an exciting new way to boost performance to extremes!

Advantages of PRO Clock

-Reduced boot times

-Lower jitter under extreme conditions for higher overclocks