



STEEL LEGEND

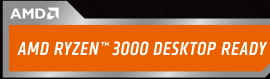
ASRock®

X570

STEEL LEGEND

Product Brief:

- Supports AMD AM4 Socket Ryzen™ 2000 and 3000 Series processors
- 10 Power Phase Design
- Supports DDR4 4666+ (OC)
- 2 PCIe 4.0 x16, 3 PCIe 4.0 x1, 1 M.2(Key E) For WiFi
- AMD Quad CrossFireX™ and CrossFireX™
- Graphics Output Options: HDMI, DisplayPort
- 7.1 CH HD Audio (Realtek ALC1220 Audio Codec), Nichicon Audio Caps
- 8 SATA3, 1 Hyper M.2 (PCIe Gen4 x4 & SATA3), 1 Hyper M.2 (PCIe Gen4 x4)
- 2 USB 3.2 Gen2 (Rear Type A+C), 10 USB 3.2 Gen1 (4 Front, 6 Rear)
- Intel® Gigabit LAN
- ASRock Polychrome SYNC



PCIe® GEN 4.0 READY



DUAL HYPER M.2

Hyper M.2 socket to support next generation PCIe Gen4 x4 M.2 SSDs. A massive full coverage M.2 Heatsink to dissipate heat efficiently and ensure your high speed M.2 SSD always working at its best.

RULE YOUR OWN LIGHTING WAY - POLYCHROME SYNC

Enjoy stunning performance and superior aesthetics with your unique rig! The built-in ARGB LEDs or the connected devices can be synchronized across the Polychrome Sync-certified accessories.



FLEXIBLE INTEGRATED I/O SHIELD

Reserve more tolerance space and allow IO shield is adjustable when installing, thus fitting chassis perfectly without any mechanical issue.



STEEL SLOT WITH NEW-GEN PCI EXPRESS 4.0

The next generation PCI Express 4.0 is capable of performing twice the speed compared to previous 3rd generation. ASRock's exclusive Steel Slot with extra anchor points are revolutionary added to ensure signal stability and also making sure heavy graphics cards to be well-installed in the PCI-E slot safely.



10 POWER PHASE DESIGN

Featuring sturdy components and completely smooth power delivery to the CPU. It offers enhanced performance with the lowest temperature for advanced gamers as well.



DR. MOS



PREMIUM 60A POWER CHOKE



POST STATUS CHECKER





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Detail Specification

Platform	- ATX Form Factor: 12.0-in x 9.6-in, 30.5 cm x 24.4 cm - 2oz Copper PCB																																																																																																																		
Unique Feature	ASRock USB 3.2 Gen2 - ASRock USB 3.2 Gen2 Type-A Port (10 Gb/s) - ASRock USB 3.2 Gen2 Type-C Port (10 Gb/s) ASRock Super Alloy - XXL Aluminum Alloy Heatsink - Premium 60A Power Choke - 50A Dr.MOS - Premium Memory Alloy Choke (Reduces 70% core loss compared to iron powder choke) - Combo Caps (Nichicon 12K Black Caps) - Nichicon 12K Black Caps (100% Japan made high quality conductive polymer capacitors) - I/O Armor - Matte Black PCB - High Density Glass Fabric PCB - 2oz Copper PCB ASRock Steel Slot Gen4 ASRock Full Coverage M.2 Heatsink ASRock Hyper M.2 (PCIe Gen4x4 & SATA3) ASRock Ultra USB Power ASRock POST Status Checker (PSC) ASRock Full Spike Protection (for all USB, Audio, LAN Ports) ASRock Live Update & APP Shop																																																																																																																		
CPU	- Supports AMD AM4 socket Ryzen™ 2000 and 3000 series processors - Intersil Digital PWM - 10 Power Phase design																																																																																																																		
Chipset	- AMD X570																																																																																																																		
Memory	- Dual Channel DDR4 Memory Technology - 4 x DDR4 DIMM Slots - AMD Ryzen series CPUs (Matisse) support DDR4 4666+(OC)/4400(OC)/4300(OC)/4266(OC)/4200(OC)/4133(OC)/3466(OC)/3200/2933/2667/2400/2133 ECC & non-ECC, un-buffered memory* - AMD Ryzen series CPUs (Pinnacle Ridge) support DDR4 3600+(OC)/3466(OC)/3200(OC)/2933/2667/2400/2133 ECC & non-ECC, un-buffered memory* - AMD Ryzen series CPUs (Picasso) support DDR4 3466+(OC)/3200(OC)/2933/2667/2400/2133 non-ECC, un-buffered memory* * For Ryzen Series CPUs (Picasso), ECC is only supported with PRO CPUs. * Please refer to Memory Support List on ASRock's website for more information. (http://www.asrock.com) - Max. capacity of system memory: 64GB - 15µ Gold Contact in DIMM Slots * Please refer to below table for AMD non-XMP memory frequency support. For more details, please refer to the QVL on ASRock's website. Ryzen Series CPUs (Matisse): Ryzen Series CPUs (Pinnacle Ridge): Ryzen Series CPUs (Picasso): <table border="1" style="display: inline-table; margin-right: 10px;"> <thead> <tr> <th colspan="4">OCWM Memory Slot</th> <th>Frequency (MHz)</th> </tr> <tr> <th>A1</th> <th>A2</th> <th>B1</th> <th>B2</th> <th></th> </tr> </thead> <tbody> <tr> <td>SR</td> <td>SR</td> <td>-</td> <td>-</td> <td>3200</td> </tr> <tr> <td>DR</td> <td>DR</td> <td>-</td> <td>-</td> <td>3200</td> </tr> <tr> <td>SR</td> <td>SR</td> <td>SR</td> <td>SR</td> <td>3200</td> </tr> <tr> <td>DR</td> <td>DR</td> <td>DR</td> <td>DR</td> <td>3200</td> </tr> <tr> <td>SR</td> <td>SR</td> <td>SR</td> <td>SR</td> <td>2133</td> </tr> <tr> <td>SR1CR</td> <td>DR</td> <td>SR1CR</td> <td>DR</td> <td>2667</td> </tr> <tr> <td>SR1CR</td> <td>SR1CR</td> <td>SR1CR</td> <td>SR1CR</td> <td>2667</td> </tr> </tbody> </table> <table border="1" style="display: inline-table; margin-right: 10px;"> <thead> <tr> <th colspan="4">UDIMM Memory Slot</th> <th>Frequency (MHz)</th> </tr> <tr> <th>A1</th> <th>A2</th> <th>B1</th> <th>B2</th> <th></th> </tr> </thead> <tbody> <tr> <td>SR</td> <td>-</td> <td>-</td> <td>-</td> <td>2933</td> </tr> <tr> <td>DR</td> <td>-</td> <td>-</td> <td>-</td> <td>2933</td> </tr> <tr> <td>SR</td> <td>-</td> <td>SR</td> <td>-</td> <td>2933</td> </tr> <tr> <td>DR</td> <td>-</td> <td>DR</td> <td>-</td> <td>2933</td> </tr> <tr> <td>SR</td> <td>SR</td> <td>SR</td> <td>SR</td> <td>2933</td> </tr> <tr> <td>SR1CR</td> <td>DR</td> <td>SR1CR</td> <td>DR</td> <td>2667</td> </tr> <tr> <td>SR1CR</td> <td>SR1CR</td> <td>SR1CR</td> <td>SR1CR</td> <td>2667</td> </tr> </tbody> </table> <table border="1" style="display: inline-table;"> <thead> <tr> <th colspan="3">UDIMM SO-DIMM Memory Slot</th> <th>Frequency (MHz)</th> </tr> <tr> <th># of DIMMs in the Channel</th> <th># of Banks per DIMM</th> <th>1.2V</th> <th></th> </tr> </thead> <tbody> <tr> <td>1 of 1</td> <td>xR</td> <td>SR-2677</td> <td>SR-2677</td> </tr> <tr> <td>1 of 2</td> <td>xR-0</td> <td>SR-2677</td> <td>SR-2677</td> </tr> <tr> <td>2 of 2</td> <td>1R-1R</td> <td>2133</td> <td>2133</td> </tr> <tr> <td>2 of 2</td> <td>2R-xR</td> <td>1866</td> <td>1866</td> </tr> </tbody> </table> <p>SR: Single rank DIMM, 1Rx4 or 1Rx8 on DIMM module label x=1 or 2 DR: Dual rank DIMM, 2Rx4 or 2Rx8 on DIMM module label</p>	OCWM Memory Slot				Frequency (MHz)	A1	A2	B1	B2		SR	SR	-	-	3200	DR	DR	-	-	3200	SR	SR	SR	SR	3200	DR	DR	DR	DR	3200	SR	SR	SR	SR	2133	SR1CR	DR	SR1CR	DR	2667	SR1CR	SR1CR	SR1CR	SR1CR	2667	UDIMM Memory Slot				Frequency (MHz)	A1	A2	B1	B2		SR	-	-	-	2933	DR	-	-	-	2933	SR	-	SR	-	2933	DR	-	DR	-	2933	SR	SR	SR	SR	2933	SR1CR	DR	SR1CR	DR	2667	SR1CR	SR1CR	SR1CR	SR1CR	2667	UDIMM SO-DIMM Memory Slot			Frequency (MHz)	# of DIMMs in the Channel	# of Banks per DIMM	1.2V		1 of 1	xR	SR-2677	SR-2677	1 of 2	xR-0	SR-2677	SR-2677	2 of 2	1R-1R	2133	2133	2 of 2	2R-xR	1866	1866
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Expansion Slot	AMD Ryzen series CPUs (Matisse) - 2 x PCI Express 4.0 x16 Slots (single at x16 (PCIe1); dual at x16 (PCIe1) / x4 (PCIe4))* AMD Ryzen series CPUs (Pinnacle Ridge) - 2 x PCI Express 3.0 x16 Slots (single at x16 (PCIe1); dual at x16 (PCIe1) / x4 (PCIe4))* AMD Ryzen series CPUs (Picasso) - 2 x PCI Express 3.0 x16 Slots (single at x8 (PCIe1); dual at x8 (PCIe1) / x4 (PCIe4))* * Supports NVMe SSD as boot disks - 3 x PCI Express 4.0 x1 Slots - Supports AMD Quad CrossFire™ and CrossFireX™ - 1 x M.2 Socket (Key E), supports type 2230 WiFi/BT module - 15µ Gold Contact in VGA PCIe Slot (PCIe1)																																																																																																																		
Graphics	- Integrated AMD Radeon™ Vega Series Graphics in Ryzen Series APU* * Actual support may vary by CPU - DirectX 12, Pixel Shader 5.0 - Shared memory default 2GB. Max Shared memory supports up to 16GB. * The Max shared memory 16GB requires 32GB system memory installed. - Dual graphics output: support HDMI and DisplayPort 1.2 ports by independent display controllers - Supports HDMI 1.4 with max. resolution up to 4K x 2K (4096x2160) @ 30Hz - Supports DisplayPort 1.2 with max. resolution up to 4K x 2K (4096x2160) @ 60Hz - Supports Auto Lip Sync, Deep Color (12bpc), xvYCC and HBR (High Bit Rate Audio) with HDMI 1.4 Ports (Compliant HDMI monitor is required) - Supports HDCP 1.4 with HDMI 1.4 and DisplayPort 1.2 Ports - Supports 4K Ultra HD (UHD) playback with HDMI 1.4 and DisplayPort 1.2 Ports - Supports Microsoft PlayReady®																																																																																																																		
Audio	- 7.1 CH HD Audio with Content Protection (Realtek ALC1220 Audio Codec) - Premium Blu-ray Audio support - Supports Surge Protection - Supports Purity Sound™ 4 - Nichicon Fine Gold Series Audio Caps - 120dB SNR DAC with Differential Amplifier - NE5532 Premium Headset Amplifier for Front Panel Audio Connector (Supports up to 600 Ohm headsets) - Pure Power-In - Direct Drive Technology - PCB Isolate Shielding - Impedance Sensing on Rear Out port - Individual PCB Layers for R/L Audio Channel - Gold Audio Jacks - 15µ Gold Audio Connector																																																																																																																		

LAN	- Gigabit LAN 10/100/1000 Mb/s - GigaLAN Intel® I211AT - Supports Wake-On-LAN - Supports Lightning/ESD Protection - Supports Energy Efficient Ethernet 802.3az - Supports PXE
Rear Panel I/O	- 2 x Antenna Ports (on I/O Panel Shield) - 1 x PS/2 Mouse/Keyboard Port - 1 x HDMI Port - 1 x DisplayPort 1.2 - 1 x Optical SPDIF Out Port - 1 x USB 3.2 Gen2 Type-A Port (10 Gb/s) (Supports ESD Protection) - 1 x USB 3.2 Gen2 Type-C Port (10 Gb/s) (Supports ESD Protection) - 6 x USB 3.2 Gen1 Ports (Supports ESD Protection) * Ultra USB Power is supported on USB3_56 ports. * ACPI wake-up function is not supported on USB3_56ports. - 1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED) - HD Audio Jacks: Rear Speaker / Central / Bass / Line in / Front Speaker / Microphone (Gold Audio Jacks)
Storage	- 8 x SATA3 6.0 Gb/s Connectors, support RAID (RAID 0, RAID 1 and RAID 10), NCQ, AHCI and Hot Plug - 1 x Hyper M.2 Socket (M2_1), supports M Key type 2230/2242/2260/2280 M.2 PCI Express module up to Gen4x4 (64 Gb/s) (with Matisse) or Gen3x4 (32 Gb/s) (with Pinnacle Ridge and Picasso)* - 1 x Hyper M.2 Socket (M2_2), supports M Key type 2230/2242/2260/2280/22110 M.2 SATA3 6.0 Gb/s module and M.2 PCI Express module up to Gen4x4 (64 Gb/s)* * Supports NVMe SSD as boot disks * Supports ASRock U.2 Kit
Connector	- 1 x TPM Header - 1 x SPI TPM Header - 1 x Power LED and Speaker Header - 1 x AMD Fan LED Header * The AMD Fan LED Header is compatible with a regular RGB LED stripe. * The AMD Fan LED Header supports LED strips of maximum load of 3A (36W) and length up to 2.5M. - 1 x RGB LED Header * Supports in total up to 12V/3A, 36W LED Strip - 1 x Addressable LED Header * Supports in total up to 5V/3A, 15W LED Strip - 1 x CPU Fan Connector (4-pin) * The CPU Fan Connector supports the CPU fan of maximum 1A (12W) fan power. - 1 x CPU/Water Pump Fan Connector (4-pin) (Smart Fan Speed Control) * The CPU/Water Pump Fan supports the water cooler fan of maximum 2A (24W) fan power. - 4 x Chassis/Water Pump Fan Connectors (4-pin) (Smart Fan Speed Control) * The Chassis/Water Pump Fan supports the water cooler fan of maximum 2A (24W) fan power. * CPU_FAN2/WP, CHA_FAN1/WP, CHA_FAN2/WP, CHA_FAN3/WP and CHA_FAN4/WP can auto detect if 3-pin or 4-pin fan is in use. - 1 x 24 pin ATX Power Connector - 1 x 8 pin 12V Power Connector - 1 x 4 pin 12V Power Connector - 1 x Front Panel Audio Connector (15µ Gold Audio Connector) - 1 x AMD LED Fan USB Header - 1 x Thunderbolt AIC Connector (5-pin) (Supports ASRock Thunderbolt AIC Card only) - 2 x USB 2.0 Headers (Support 4 USB 2.0 ports) (Supports ESD Protection) - 2 x USB 3.2 Gen1 Headers (Support 4 USB 3.2 Gen1 ports) (Supports ESD Protection)
BIOS Feature	- 256Mb AMI UEFI Legal BIOS with GUI support - Supports "Plug and Play" - ACPI 5.1 compliance wake up events - Supports jumperfree - SMBIOS 2.3 support - CPU, CPU VDDCR_SOC, DRAM, VPPM, PREM VDD_CLDO, PERM VDDCR_SOC, +1.8V, VDDP Voltage Multi-adjustment
Support CD	- Drivers, Utilities, AntiVirus Software (Trial Version), Google Chrome Browser and Toolbar
Software and UEFI	Software - ASRock A-Tuning - ASRock Polychrome SYNC - ASRock XFast LAN * These utilities can be downloaded from ASRock Live Update & APP Shop. UEFI - ASRock Full HD UEFI - ASRock Instant Flash - ASRock Easy RAID Installer
Hardware Monitor	- Temperature Sensing: CPU, CPU/Water Pump, Chassis, Chassis/Water Pump Fans - Fan Tachometer: CPU, CPU/Water Pump, Chassis, Chassis/Water Pump Fans - Quiet Fan (Auto adjust chassis fan speed by CPU temperature): CPU, CPU/Water Pump, Chassis, Chassis/Water Pump Fans - Fan Multi-Speed Control: CPU, CPU/Water Pump, Chassis, Chassis/Water Pump Fans - Voltage monitoring: +12V, +5V, +3.3V, CPU Vcore, CPU VDDCR_SOC, DRAM, VPPM, PREM VDDCR_SOC, +1.8V, VDDP
OS	- Microsoft® Windows® 10 64-bit
Certifications	- FCC, CE - ErP/EuP ready (ErP/EuP ready power supply is required)
Accessories	- Quick Installation Guide, Support CD - 4 x SATA Data Cables - 3 x Screws for M.2 Sockets - 2 x Standoffs for M.2 Sockets