Sapphire NITRO+ Radeon RX 7900 XTX Vapor-X

Artikel	703290
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Sapphire

Software BIOS Switch
Switch from OC BIOS to Secondary mode or back using our TriXX software for a quick and easy switch between your dual BIOS modes.

Backplate
Provides rigidity and helps cool your card by increasing heat dissipation.

ARGB
Personalize the look of your NITRO + card with its built-in ARGB.

Outputs
Choose from HDMI and DP slots for a maximum of 4 outputs

Cooling
Innovative cooling technologies to ensure optimal performance and airflow.

Vapor-X Cooling
The Vapor Chamber is mounted in contact with the surface of the main chip and memory. Since the entire area transfers heat at the same rate, the Vapor-X module has been engineered to operate more efficiently than a copper heat sink at carrying away heat. Upon gaining heat, the heat source is pushed to the Vaporization Wicks to begin the heat dissipation process. Due to extreme low pressure, working fluid and pure water are easily vaporized, and transferred through the vacuum until reaching the Condensing Wick which is adjacent to the cooled surface. From here, it turns back to a liquid state whereby the liquid is then absorbed into the Transportation Wick by capillary action and moved back towards the Vaporization Wick. A recycled liquid system occurs when the heat source reheats the liquid and it becomes re-vaporized by the Vaporization Wick to restart the Vapor-X Cooling process.

WAVE Fin Design & V-Shape Fin Design for GPU cooling
The WAVE Fin Design reduces friction when the wind goes into the fin module resulting in a reduction of the wind cut noise.

The V-shape fin design on top of the GPU accelerates and centralizes the air flow around the GPU to dissipate heat efficiently.

Die Casted Aluminum-Magnesium Alloy Frame & Frontplate Heatsink
The Die Casted Aluminum-Magnesium Alloy Frame enveloping the sides of the PCB help to strengthen the structural stiffness of the shroud to create a strong, scratch resistant and high quality finish that elevates the aesthetic and strength of the graphics card. Overlaying the entire PCB, the die casted Frontplate Heatsink cools the VRM, Memory and Chokes resulting in superior heat dissipation for top-notch airflow and cooling performance.

Digital Power Design
SAPPHIRE NITRO+ & PULSE AMD Radeon™ RX 7900 Series are designed with digital power which provides accurate power control and excellent power efficiency

Ultra High Performance Conductive Polymer Aluminum Capacitor
The Ultra High Performance Conductive Polymer Aluminum Capacitor has a small PCB foot print but high volumetric capacitance that makes 20-phase power possible on the RX 7900 series graphics card. The capacitor offers stable capacitance at a high frequency and temperature with very low signal noise, ensuring the stability and reliability of the product.

High TG Copper PCB
The GPU is mounted on to the high-density 14 layer 2oz Copper and high TG PCB to match the rapid speed, high current and increased power requirement of the GPU and memory to guarantee high stability of the PCB during operation.

Tough Metal Backplate
The all-aluminum backplate provides additional rigidity that guarantees nothing bends and dust stays out. It also helps cool your card by increasing heat dissipation.

Dedicated VRM Cooling
Dedicated VRM cooling module to create optimal heat dissipation for peak airflow and cooling performance.

Angular Velocity Fan Blade
The Angular Velocity Fan Blade provides a double layer of downward air pressure which alongside the air pressure on the outer ring of the Axial fan, results in up to 44% more downward air pressure and up to 19% more airflow for a quieter and cooler operation when compared to the previous generations.

Optimized Composite Heatpipe
The composite heatpipes are fine-tuned for each individual cooling design with optimal heat flow, efficiently and evenly spreading out the heat to the entire cooling module.

Assistive System Fan Control
When the temperature of the GPU increases, the graphics card fans speed up accordingly. To further help with cooling and heat dissipation, the Assistive System Fan Control feature in SAPPHIRE's TriXX software controls the speed of a system fan to automatically increase at the same time as the graphics card fans, this assists in expelling the heated air from the entire system faster.

OC BIOS
This BIOS has been engineered to the maximum TGP setting for maximized gaming performance

Fuse Protection
In order to protect your card, the SAPPHIRE cards have fuse protection built into the circuit of the external PCI-E power connector to keep the components safe.

Dual BIOS
Choose between OC BIOS or Secondary mode to enhance your gaming experience.

Graphics Card Supporter
Bundled with a graphics card supporter to keep the graphics card in place on the PCIe Slot.

Dual ARGB Light Bar
With tasteful shroud design augmented by ARGB LEDs, you can change the colors of the LED, for a customized design. This can be controlled via TriXX software. Choose from different modes including Fan Speed Mode, PCB Temperature Mode or the colourful rainbow mode or turn off the LEDs.

External ARGB Control Sync
Enable the external synchronization of RGB LEDs between the graphics card and the motherboard using the 3-pin header in the tail. Gamers can then choose if the graphics card performs the RGB LED effects independently or if the motherboard acquires control.

Fan Quick Connect
If there's a fan problem, you don't have to return the entire card. SAPPHIRE or our channel partners will send out a replacement fan directly to you! That means they're easy to remove, clean and replace, with just one screw holding them securely in place.

Two-Ball Bearing
These feature Dual Ball bearing fans, which have an approximately 85% longer lifespan than sleeve bearings in our tests. The improvements to the fan blades means the solution is up to 10% quieter than the previous generation.

TRI-X COOLING TECHNOLOGY
An innovative mixture of Robust VRM Cooling and independent memory thermal modules work in tandem to remove heat efficiently and effectively across all sections

Tunneled fins increase convection airflow and ensure wind continuously flows through the cooling and fan system

Heat is dissipated by a trio of large efficient fans running anticlockwise to maximize airflow.

Zusammenfassung

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Sapphire NITRO+ Radeon RX 7900 XTX Vapor-X, Radeon RX 7900 XTX, 24 GB, GDDR6, 384 bit, 7680 x 4320 pixels, PCI Express x16 4.0

Sapphire NITRO+ Radeon RX 7900 XTX Vapor-X. Graphics processor family: AMD, Graphics processor: Radeon RX 7900 XTX. Discrete graphics card memory: 24 GB, Graphics card memory type: GDDR6, Memory bus: 384 bit. Maximum resolution: 7680 x 4320 pixels. DirectX version: 12 Ultimate. Interface type: PCI Express x16 4.0. Cooling type: Active, Number of fans: 3 fan(s), Illumination colour: Multi

Merkmale

Performance

Packaging data

Package type	Box

Power

Minimum system power supply	800 W
Supplementary power connectors	3x 8-pin
Power consumption (max)	420 W

System requirements

Windows operating systems supported	Windows 10 x64, Windows 11 x64
Linux operating systems supported	Yes
Minimum RAM	8192 MB

Weight & dimensions

Depth	320 mm
Height	71.6 mm
Width	135.8 mm

Memory

Discrete graphics card memory	24 GB
Graphics card memory type	GDDR6
Memory bus	384 bit
Data transfer rate	20 Gbit/s

TV tuner integrated	No
DirectX version	12 Ultimate
Dual Link DVI	No
AMD FreeSync	Yes

Ports & interfaces

Interface type	PCI Express x16 4.0
HDMI ports quantity	2
DisplayPorts quantity	2
DisplayPort version	2.1

Design

Cooling type	Active
Cooling technology	Sapphire Vapor Chamber cooling
Number of fans	3 fan(s)
Form factor	Full-Height/Full-Length (FH/FL)
Bracket height	Full-Height (FH)
Number of slots	3.5
Illumination	Yes
Illumination colour	Multi
Product colour	Silver

Processor

CUDA	No
Graphics processor family	AMD
Graphics processor	Radeon RX 7900 XTX
Processor boost clock speed	2680 MHz
Maximum resolution	7680 x 4320 pixels
Stream processors	6144
Maximum displays per videocard	4
Lithography	5 nm
Infinity cache	96 MB
Ray accelerators	96