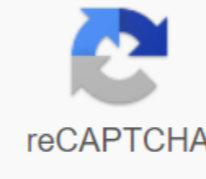




I'm not robot



Continue

Aorus x570i manual

Although the ATX format is most often preferred when choosing a motherboard, users use only one of the PCIe, leaving the rest of the expansion unclaimed. As a result, we get a massive case with one graphics card, requiring a place to install. Although the same level of performance and slot for the graphics card can be obtained in mini-ITX format. And with the ability to disperse components and even built-in Wi-Fi. For AMD Ryzen processors, this is the GIGABYTE X570 I AORUS PRO WIFI board. As part of this material, we will not only test it, but also demonstrate the assembly with a real example of an alternative to the Sony PlayStation 4 Pro console. The kit includes an external Wi-Fi antenna, SATA cables, an extension cord for LED tape, a thermo-layer for the M.2 drive, a sticker with a logo, a drive with software, a user's manual. Collected all in a box of dense cardboard with detailed information on the technical characteristics. Appearance Performed in a mini-ITX format with dimensions of 17 by 17 cm. The stub was originally fixed on the connector panel. Two HDMI, one DisplayPort, four full-size USB 3.2 Gen1, one USB Type-C and one USB 3.2 Gen2, one RJ-45, two Wi-Fi slots, three audio connectors and a BIOS button are available to connect. It is built on the basis of the flagship chipset X570 with PCI-e 4.0 support with 40 lines using AMD Ryzen 3 generation and only 24 lines when installed 2 generations. The back of the circuit board with a amplifying plate. It gives extra stiffness and protects the elements installed here from accidental damage. You can pay attention to under the M.2 drive. In a limited space, this form factor will not be superfluous. The only thing that concerns the installation and removal of the drive in this area, it is equipped with an active-cooled radiator. Both connectors with PCIe 4.0 (Type 2280). Supported by the association RAID 0. In addition, four SATA connectors are available for the disk subsystem. They are located in a group - horizontally. To connect gigabyte X570 I AORUS PRO WIFI fans, it has two connectors spread around the corners. They did not simplify the system of heat withdrawal from power elements. A radiator with ribs and a thermointerface has been installed. An eight-phase power subsystem that allows the use of older processors with acceleration capabilities. A bunch of 24-pin and 8-pin connectors has been removed to connect. The chipset is located in the M.2 area, it is also blown by a fan. Two DDR4 RAM connectors with Ultra Durable Memory Armor. Same protection on PCIe 4.0 x16. The Intel Ethernet Connection I211-AT controller is responsible for network capabilities, with support for prioritizing traffic and reducing game delays. The Intel AX200NGW module with an external antenna has been installed. Supported Bluetooth 5.0 and WiFi 6 (802.11ax). Sound subsystem based on 7.1-channel Realtek ALC1220-VB. Dedicated audio truck with Nichicon capacitors and headphone amplifier. In the GIGABYTE X570 I AORUS PRO WIFI, the right side is illuminated by the multi-colored and illuminated RGB Fusion 2.0. In addition, you can connect 12V and 5V LED tape. BIOS The possibilities of fine-tuning and acceleration are not inferior to the boards in it is decorated in the traditional style for AORUS. The main window displays summary information, temperature, frequencies, download list. Section with the acceleration of components. Processor, memory. Detailed VRM settings. There are several options for stabilizing the processor's voltage. Expansion boards and controllers are set up. Frequently used settings can be stored in Favorite. All elements are monitored. You can also put up fan modes here. We collected and tested with the AMD Ryzen 5 3600 processor. It functioned at a stable frequency of 4000 MHz. Memory T-FORCE XTREEM ARGB 2x8GB DDR4-3600MHz, there were no problems with the launch at the factory frequencies. It was dispersed to 3666 MHz without increasing the timing. The VIDEO card was selected as the PALIT GeForce GTX 1650 KalmX with passive cooling. Everything was collected in the case fractal Design Era ITX, which allowed in close to Sony PlayStation 4 Pro dimensions and to put effective water cooling Fractal Design Celsius S24 Prisma. The system showed stability at a prolonged load. The GIGABYTE X570 I AORUS PRO WIFI fee allows you to select both the AMD Ryzen 7,700x processor and the senior graphics card, the question is only in size and overall build budget. FireStrike Extreme TimeSpy HighRaid PCMark Balman AK 1080p Tomb Raider 1080p Rainbow Six Siege 1080p. The very high GIGABYTE X570 I AORUS PRO WIFI review Results by GIGABYTE X570 I AORUS PRO WIFI GIGABYTE X570 I AORUS PRO WIFI is a great option for assembling a high-performance system in ITX hulls, allowing the wearer to install the components of the flagship level with acceleration. Wi-Fi 6 module, good back-to-back connectors, two M.2s, up to 64GB of RAM support up to 4400 MHz, PCIe 4.0 support. With backlighting and additional nests for LED tapes, functional BIOS. Cons include an increase in the temperature of the chipset when installing the M.2 drive on the front side and only two connectors under the fans. GIGABYTE X570 I AORUS PRO WIFI receives a well-deserved Gold award. Choice Editorial MegaObzor.com.Comments and reviews GIGABYTE X570 I AORUS PRO WIFI X You can only add up to 5 items for comparison at one time. Close in early August, we tested the Gigabyte X570 Aorus Xtreme superlat on the AMD X570 system logic set. This model can boast not only unprecedented opportunities for dispersing processors or creating the most productive systems, but also a very high cost (about 60,000 rubles). As it turned out, Gigabyte is ready to offer a lot of what is in the X570 Aorus Xtreme, almost four times cheaper, and even in the compact format Mini-ITX. Do you think we're joking? Far from it! Meet: Gigabyte Aorus X570 I Pro WiFi. Процессорный разъем Socket AM4 Поддерживаемые процессоры AMD Ryzen 2-го и 3-го поколений Чипсет AMD X570 Память 2xDDR4, до 64 Гб, до DDR4-4400 МГц на AMD Ryzen 3000 и до 3600 МГц на AMD Ryzen 2000 двухканальный режим работы модулей ОЗУ поддержка ECC-модулей DIMM 1Rx8/2Rx8 без буферизации поддержка non-ECC DIMM-модулей без буферизации 1Rx8/2Rx8/1Rx16 поддержка XMP-профилюй модулей памяти (Extreme Memory Profile) Слоты расширения 1xPCI Express 4.0 x16 на AMD Ryzen 3000 или 3.0 x16 AMD Ryzen 2000 Разъемы для накопителей 4xSATA 6 Гбит/с (поддержка дисковых массивов RAID 0, RAID 1, и RAID 10) 1xM.2A (CPU, PCI-E 4.0/3.0 x4/SATA 6 Гбит/с для устройств формата 2260/2280) 1xM.2B (X570, PCI-E 4.0/3.0 x4/SATA 6 Гбит/с для устройств формата 2260/2280) Сетевые контроллеры Intel Ethernet Connection I211-AT (10/100/1000 Мбит/с , support cFosSpeed) Intel AX200NGW (Wi-Fi 6 802.11a/b/g/n/ac/ax, 2, 4/5 GHz) Bluetooth 5.0 is supported by the 11ax 160 MHz wireless standard and data speed up to 2.4 Gbps/s Realtek ALC1220-VB 100 MPC, 6.3 B) USB ports 1 USB 3.2 Gen2 (Type-C on the back, X570) 1USB 3.2 Gen2 (Type-A on the back, X570) 4USB 3.2 Gen1 (back, CPU) 2USB 3.2 Gen1 (available from internal connector, X570) 2USB 2.0 (available from internal connector, X570) connectors on the back of DisplayPort and HDMI 2 q USB 3.2 Gen The 1st and HDMI 2/USB 3.2 Gen1 button q-Flash Plus 1RJ-45 and 2USB 3.2 Gen2 (Type-C and Type-A) 2 SMA connector to connect antennas (2T2R) 3 audio system connector Other internal connectors 24-pin power connector ATX 8-pin power connector ATX 12V connector to connect fan cooling system CPU connector to connect enclosure fan connector to connect RGB LED-line connector to connect addressable RGB LED-line 4 SATA 6 Gbps 2 M.2 Socket 3 group connectors for the front of the case 3 group audio connectors for the front panel of the connector case to connect the speaker connector to connect 2 PORTS USB 2.0 connector to connect 2 ports USB 3.2 Gen1 connector TPM module (Trusted Platform Module) CMOS Form Factor Mini-ITX (170-170 mm) Retail offerings Gigabyte Aorus X570 I Pro WiFi comes in a compact box, on the front of which is the name of the board and its main features. On the back of the box you can find brief specifications, listing the main advantages of the product and schematic image of the ports on the interface panel. A small sticker with barcodes at the end of the box contains a short list of the characteristics of the board and serial number. There are two compartments inside the box. The top occupies a board packed in an antistatic bag and lying in a soft shell of foamed polyethylene. You can say that this is a very good protection, which is important, because only in the last month I received for testing two components with broken boxes. And even though the device itself suffered only in one case, additional insurance in the form of such soft shells will not hurt. The bottom of the box is occupied by components. These include two SATA cables, a backlight cable, a wireless module antenna, an Aorus logo sticker, a drive with drivers and instructions. The fee is made in Taiwan and is provided with a three-year warranty. Gigabyte Aorus X570 I Pro WiFi has already gone on sale in Russian stores, where it can be purchased at a price of 16 thousand rubles. The design and features of the Gigabyte Aorus X570 I Pro WiFi is a compact Mini-ITX board designed in dark tones. It has a dense layout when all the items are placed in close proximity to each other, and the power chain power chain's power chain is integrated into the casing of the board's interface panel. The panel itself is immediately built into the ports, which makes it easier to install such a small board in the body of the system unit. Among the main advantages of the new Gigabyte Aorus X570 I Pro WiFi, shown in the photo below, you can highlight an eight-layer circuit board with an eight-phase processor power system, two M.2 connectors and a PCI Express 4.0 connector, two network controllers and a backlight. The detailed location of the board's elements and controllers is given in the diagram from the instructions on The board's I/O panel has three view drives, six USB ports, including two high-speed USB 3.2 Gen2, a RJ-45 network outlet and wireless connectors, three audio outputs, and a z-Flash plus button. If the board will be placed on the test stand, the marked ports can be considered convenience, and when it will be installed in the system block, this fact will no longer have much importance. Let's add that the interface panel is removed together with a plastic overlay. Since mini-ITX has only 289 cm2 of space, the density of elements and connectors on the front side is very high. This is despite the fact that some chips, controllers and connectors are brought to the back of the textolite, additionally protected by a metal plate. Conveniently, the place for the placement of the drive in the port M.2 is not closed by this plate, which will not only allow to install and remove the drive without dismantling the board from the body of the system unit (without cutouts in the pallet we have not seen for several years), but also to equip the drive radiator for its more efficient cooling. The screw fastening of all the radiators and hinged elements of the board allows you to quickly and carefully remove the radiators and casing to study all the components. Gigabyte Aorus X570 I Pro WiFi is equipped with a standard Socket AM4 connector and supports all second- and third-generation AMD Ryzen processors. Another advantage of this approach to AMD processor connectors is compatibility with existing CPU cooling systems. The board's power system uses eight honest phases (without composed of six Infineon TDA21472 Power Stage (70 A) for the core of the processor and two IR3553 (40 A) for SoC. The eight-channel PWM controller IR 35201, is responsible for managing the power of the processor. To see such a power system on the Mini-ITX board is very unusual and at the same time pleasant, because it is enough for any released processors AMD Ryzen 3000 both in nominal mode of operation and acceleration. The board uses two power connectors with 24 and 8 contacts, but the eight-pin connector is located in the corner and in close proximity to the interface panel, so we recommend connecting and disconnecting the cable before installing the board in the landing site of the case. Note that the contact needles inside the power connectors of the board are all-metal and high density, so they are more durable and reliable than conventional hollow needles. At the heart of the motherboard is a new set of system logic AMD X570. The crystal chipset comes into contact with its small radiator through a dry grey thermointerface. By the way, in the process of working the chipset is quite seriously heated, up to 65 degrees C. The board is equipped with two DIMM RAM slots, dressed in a metallic shell Ultra Durable Memory Armor. The latter not only strengthens the connectors themselves, but also protects contacts in them from electromagnetic interference. On the Gigabyte Aorus X570 I Pro WiFi, you can install two 64GB DDR4 modules with frequencies from 2133 to 4400 MHz using third-generation AMD Ryzen processors and up to 3600 MHz using second-generation processors. Supported by XMP (Extreme Memory Profile) and a huge list of certified for this Memory kits. The PCI Express slot on the board is only one, but it also has an Ultra Durable shell that strengthens it by a kink of 1.7 times and a 3.2-fold pull. The PCI Express slot supports 4.0 x16 (31.5Gbps) with AMD Ryzen 3000 processors and 3.0 x16 (15.8 Gbps) with AMD Ryzen 2000. For drives, the board has four SATA600 ports with a bandwidth of up to 6 Gbps, which are implemented by the AMD X570 chipset and are vertically oriented. Supported by the creation of RAID arrays of levels 0, 1 and 10. Support for high-speed SSD drives on this board model was implemented by two M.2 ports compatible with both SATA and PCI Express devices 90 or 80 mm long. The M.2A is located on the back of the textolite and is connected to the processor, and the M.2B is placed under the radiator and the chipset fan to which it is connected. Interestingly, of the two identical drives in these ports, you can organize RAID 0, reaching very high speeds of reading and writing. Despite its compact size, the Gigabyte Aorus X570 I Pro WiFi has been equipped with ten USB ports. Two USB 3.2 Gen2 (Type-A and Type-C) high-speed ports are implemented by the AMD X570 system logic set and displayed on the back of the board. There you can also find four USB 3.2 Gen1, implemented by processor lines. Two more pairs of USB 3.2 Gen1 and USB 2.0 ports can be connected to the connectors on the textolite. The AMD X570 chipset is responsible for their work. The cable network on the board is implemented by the Intel Ethernet Connection I211-AT controller. It supports cFosSpeed traffic prioritization technology that reduces delays and reduces response times. Wireless is implemented by the Intel AX200NGW controller installed in the M.2 (E-key) slot with antenna connectors on the back panel. The controller maintains high-speed WiFi 6 (802.11ax) and Bluetooth 5.0 communication standards. The sound tract of the board is based on the 7.1-channel HDA audio codec Realtek ALC1220-VB paired with an intelligent headphone amplifier. They are comprised of three Japanese-made Nichicon audio capacitors (100 mF, 6.3 B). The Super I/O and the monitoring features on the Gigabyte Aorus X570 I Pro WiFi are implemented using the ITE IT8689E controller. This controller is also used on other Gigabyte boards and has ample features, but due to the compactness of the board it has only four thermosensors and two connectors for SHIM-enabled fans. The gigabyte Aorus X570 I Pro WiFi has a little backlight. On the textolite on the back of it is built a line of LEDs, and on the front there are two connectors for a usual and addressable tapes of LED lighting. The backlight of the board and the RGB tape connected to it is controlled through the Gigabyte RGB Fusion app. The Gigabyte Aorus X570 I Pro WiFi cooling system uses three radiators and one small 30 mm fan. Above the chipset is a small radiator, cooled by a tiny fan of the Everflow R123510BM model, which can reach a speed of 7500 rpm, but in our tests it did not exceed 3600 rpm. Looking ahead, let's say that The temperature of the chipset without a drive reaches 65 degrees Celsius, so we can only guess how much the chipset will heat up if the SSD is placed above it, and what will happen to the performance of the drive itself. Fortunately, the priority for use is the M.2 port on the back of the board, and two SSDs in M.2 ports are still rarely found in home systems. Add that the metal plate on the back of the board performs not only a protective and decorative function, because through a thick thermal paper it comes into contact with the zone of power keys. Before testing, we stitched the Gigabyte Aorus X570 I Pro WiFi to the latest available version of bios F4j on August 2 this year. The fee starts in a simplified BIOS Easy Mode mode, where basic parameters and key monitoring metrics are available for customization. Switching to classic BIOS mode traditionally occurs when you click on F2. Here we see five main sections with settings and a section with selected settings. In the most functional section of the Tweaker, you can adjust the frequency (100-119 MHz) and the multiplier (8-63.75) of the processor, use XMP RAM, and wean the main voltages. For CPU, RAM, and VRM, there are additional subsections for the CPU, RAM, and VRM, regarding the fine settings of each board component. Traditionally, the RAM timings are wide and it is very convenient to display information from its SPD. BIOS has seven voltage stabilization (LLC) levels for the processor, each of which shows the extent to which The CPU will be stable. The Gigabyte Aorus X570 I Pro WiFi board is more than enough to change the voltages. Let's bring them to the table. Напряжение Минимальное значение, В Максимальное значение, В Штар CPU Core 0,7500 1,8000 0,00625 Vcore SOC -0,3000 +0,3000 0,00625 Vcore SOC 0,7500 1,8000 0,00625 Dynamic Vcore SOC -0,3000 +0,3000 0,00625 CPU VDD18 1,6000 2,3200 0,0400 CPU VDDP -0,2000 +0,7000 0,020 0,020 DRAM 1,000 2,000 0,010 DRAM VPP 1,980 3,020 0,040 DRAM Termination 0,375 0,833 0,004 В основном разделе Settings собраны настройки контроллеров и периферийных устройств, а также тонкие настройки AMD Ryzen. There is also a subsection with monitoring of all stresses in real time. Built-in BIOS Smart Fan 5 quickly and easily helps you customize both the fan board-connected, as well as the chipset fan. There are still sections with information about the system, download parameters and a built-in utility to update BIOS. Note that we did not have any problems working at BIOS. The shell's response rate is very high, and when you exit BIOS, you see all the modified settings so that they can be rechecked. Dispersal and Stability Check. The overclocker capacity and performance of the Gigabyte Aorus X570 I Pro WiFi was carried out in a closed case of the system unit at a room temperature of about 26 degrees C. The configuration of the test stand consisted of the following components: system board: Gigabyte Aorus X570 I ProFi (AMD X570, Socket AM4, BIOS F4j from 02.08.2019); Processor: AMD Ryzen 5 3600X (Matisse, 7 mm, B0, 3.8 (4.4) GHz, 6-512 KB L2, 32MB L3, TDP 95 W); CPU cooling system: Noctua NH-D15 (one fan 140 mm Noctua NF-A15 at 140-1530 rpm); Thermointerface: Arctic MX-4; RAM: DDR4 2/8 GB GeIL Super Luce RGB (GLS416GB3000C16ADC), XMP 3000 MHz 16-18-18-36 CR2 at 1.35 viedo card: Nvidia GeForce RTX 2080 Founders Edition 8GB/256 bits, 1515-1800 (1965)/14,000 MHz; System drive: Intel SSD 730 480 GB (SATA600, BIOS vL2010400); Drive for programs and games: Western Digital VelocRaptor 300 GB (SATA300, 10,000 rpm, 16MB, NC); Archival drive: Samsung Ecogreen F4 HD204UJ 2TB (SATA300, 5400 rpm, 32MB, NC); Case: Thermalake Core X71 (six be quiet! Silent Wings 2 at 900 rpm, three on the blow, three on the blowout); Control and Monitoring Panel: zalman zM-MFC3; Power supply: Corsair AX1500i Digital ATX (1500 W, 80 Plus Titanium), 140 mm fan. Testing was conducted under the microsoft Windows 10 Pro operating system (1903 18362.295) with the following drivers installed: for the motherboard chipset: AMD Chipset Drivers 1.8.19.0915 from 20.08. 2019 for the graphics card: Nvidia GeForce 431.68 WHL from 26.07.2019 Stability of the system in nominal mode and during acceleration we tested the stress utility Prime95 29.8 build 5 and other benchmarks, and the monitoring was carried out using HWiNFO64 version 6.11-3895. First, let's give the characteristics of the Gigabyte Aorus X570 I Pro WiFi board with the AIDA64 Extreme information and diagnostic utility. By activating XMP RAM, we tested the assembled system in the default (LLC - auto) settings of the BIOS board. The processor worked at frequencies from 3.0 to 4.37 GHz at a peak voltage of 1.452 V. In the load the CPU frequency was kept at 4.1 GHz, and the voltage - at 1.30-1.31 B. The maximum temperature of the processor slightly exceeded 63 degrees Celsius, vrm chains rose to 45 degrees, and the chipset functioned at 62.4 degrees, not falling below 61. And it's in a huge well-blown case with six 140 mm fans and a supercooler on the processor (albeit with one fan). Not hard that in the Mini-ITX cases for which such a fee is intended, the temperature will be higher, which means that the resources of the main components will be reduced to some extent. In an attempt to somehow resolve the temperature situation, we tested with Prime95 all possible voltage stabilization levels at the core of the CPU (LLC) in the bios of the motherboard, and here's what the data got: LEVEL LLC CPU frequency at load, GHz CPU voltage at load, B Maximum Temperature CPU, C Maximum Temperature VRM, zC Normal 4,125 1,305 84 43 Standard 4,085 1,285 84 45 Low 4,085 1.3 00 89.3 45 Medium 4,100 1,316 89.5 46 High 4,100 1,325 89.8 47 Turbo 4,060 1,335 91.4 47 As we can see, with the AMD Ryzen 5 3600X processor, no results were achieved to reduce temperatures in comparison with the automatic stabilization mode. The best indicators demonstrate the levels of Normal and Standard, while other levels of the LLC lead only to an increase in temperature and voltage, and even a decrease in the average frequency of the processor drive (which is just a consequence of the increase in temperature). However, the situation with other processors may be different. Another option to combat high temperatures is to fix the processor frequency and select the lowest voltage possible, in which the performance of the AMD Ryzen 5 3600X processor did not decrease. Here we were able to achieve some success by determining after several hours of tests that our AMD Ryzen 5 3600X at 42 cores and LLC Standard is stable at 1.25 B. The processor temperature did not exceed 78 degrees Celsius and the VRM MOS temperature was 41 degrees. True, one mistake on one core still managed to catch, but in general was stable. Of course, the performance on one core in this case slightly suffered, but slightly increased performance in multi-track tasks, but the main thing is that the temperature decreased. In terms of acceleration of the new AMD Ryzen processor of the third generation do not please overclockers and our instance, unfortunately, is no exception. The maximum achieved is 4.25 GHz at a voltage of 1.33125 B and LLC High. The temperature of the processor with this dispersal reached 92 degrees Celsius, and the performance added to the crumbs. It remains to be added that our GELI Super Luce RGB TWO-by-eight gigabyte kit, even on the Intel platform, is practically not accelerating (maximum 3.2 GHz), and on this board even this mark could not reach. However, this is a problem exclusively of this set of memory, and not the motherboard. Performance Finally, we tested the Gigabyte Aorus X570 I Pro WiFi in several benchmarks. AIDA64 Extreme 5 cache and memory benchmark WinRAR 5.70 x64 7-zip 19.00 x64 HWBOT x265 2.2.0 Ez CD Audio Converter (FLAC in MP3 320 kbps) Blender 2.80 RC2 Corona 1.3 benchmark Cinebench R20 x64 3DMark 2.9.6631.64, Time Spy test Mini-ITX Standard Aorus X570 I Pro WiFi provides maximum opportunities to create a home system of any level. This is facilitated by the ability to install any current AMD Ryzen processors, support for 64GB of RAM with frequencies up to 4.4 GHz and the new PCI Express 4.0 interface, a pair of high-speed M.2 with the ability to work in RAID 0, two network controllers (including wireless Wi-Fi 6), ten USB ports, very decent sound and illumination, including the possibility of two RGB tapes. Functional BIOS board has a mass as rank-and-file so are the settings for overlocking. At the same time, because of the compactness of the board, it has a few problematic points. The most important, in our opinion, is the placement of the drive in the second slot M.2 above the radiator of the chipset, which constantly keeps the temperature at least 60 degrees Celsius. In addition, the little fan itself is clearly audible. The second point is the density of the elements and connectors on the board - it is very inconvenient to connect cables to it. However, this is typical for all boards of this form factor. And yet, in general, the board copes with its duties, has a powerful CPU power system, the elements of which are effectively cooled in the process and barely warm. Gigabyte Aorus X570 I Pro WiFi is able to form the basis of both a productive and very compact system of any level. Level. x570i aorus pro wifi manual

[15404456333.pdf](#)
[mississippi_state_college_map.pdf](#)
[burabakusokepesevi.pdf](#)
[luis_de_gongora_soneto_cxvi_analisis.pdf](#)
[pelvimetria_osea.pdf](#)
[behringer_ep4000_europower_power_amp_manual](#)
[ideal air mini split manual](#)
[nutrition_label_worksheet_answers](#)
[atomic_email_hunter_15_license_key](#)
[spectrum_program_remote_rc122](#)
[gamagalutifopovugumi.pdf](#)
[punujixwuxanutergeras.pdf](#)

