## Features and Specifications

This chapter lists the features and specifications of the Aspire GX-281 Desktop Computer.
NOTE The items listed in this section are for reference only. The exact configuration of your PC depends on the model purchased.

## System Features

| Component | Description |
| :---: | :---: |
| Operating system support | - Microsoft Windows 10 ML x64 <br> - Microsoft Windows 10 SL x64 <br> - Microsoft Windows 10 CN x64 <br> - Linpus <br> - FreeDOS |
| Processor | - Socket AM4 <br> - Supports the following AMD Summit Ridge processors: <br> - AMD RYZEN 7 1700X 3.4G 16M(L3) 2400 Octa Core 95W <br> - AMD RYZEN 71700 3.0G 16M(L3) 2400 Octa Core 65W <br> - AMD RYZEN 51600 3.2G 16M(L3) 2400 Hexa Core 65W <br> - AMD RYZEN 51400 3.2G 8M(L3) 2400 Quad Core 65W |
| Chipset | FCH: AMD Promontory B350 |
| Graphics controller | One PCle x16 graphics card (nVidia GTX1070/1060/1050) |
| Hardware monitor | Super I/O |
| Memory | Support DDR4 1.2V 2400 U-DIMMs (4GB, 8GB or 16GB) dual channel up to 64GB total memory |
| PCI expansion options | - One PCI Express x8 slot (reserved for GPU card installation) <br> - Two M. 2 slots |
| Display | - Quadruple independent display support (via graphics card) <br> - Maximum resolution <br> - HDMI: $4096 \times 2160$ @ 60Hz <br> - Display Port: $4096 \times 2160$ @ 60Hz <br> Note: No onboard display support. |
| Audio | Realtek ALC662-VD 5.1 Channel High Definition Audio Codec |
| I/O ports | - Front panel <br> - Two USB 3.0 ports (one with fast charge support) <br> - One Headphone jack <br> - One Microphone jack <br> - One SD card reader slot <br> - Rear panel <br> - Four USB2.0 ports <br> - Two USB 3.1 ports <br> - One Ethernet jack (RJ45) <br> - One Microphone jack <br> - One Line-out jack <br> - One Line-in jack |


| Component | Description |
| :---: | :---: |
| Hard disk drive (HDD) | - Two HDD bays supporting 3.5-inch or 2.5-inch SATA 3.0 HDD <br> - Support 7200 rpm SATA HDD in 1TB/2TB/3TB capacities |
| Solid state drive (SSD) | - One M. 2 slot supporting Solid State Drives (SSD) <br> - Support SSD in 256GB capacity |
| Optical disc drive (ODD) | - One ODD bay supporting 9mm tray type SATA ODD <br> - Supports DVD-R/RW drive or DVD-Super Multi double-layer drive |
| Card reader | SD card reader |
| Connectivity | - Wired LAN: Onboard 10/100/1000 Ethernet (Realtek RTL8111GA) <br> - WLAN option: 802.11 ac WLAN+BT (Intel 7265 Stonepeak) |
| Power supply | FR 500W power supply unit (Active PFC) |
| Security | - BIOS-based user and supervisor passwords <br> - Kensington lock |
| LED display and buttons | - Power LED <br> - Wireless charger LED <br> - Power button <br> - ODD eject button |
| System BIOS | - AMI BIOS with 16 MB SPI Flash ROM <br> - Supports ACPI revision 5.0 standard <br> - Supports Plug and Play, STR(S3)/STD(S4), hardware monitor, Multi Boot, and DMI protocols |

## Physical Specifications

| Aspect | Description |
| :--- | :--- |
| Chassis dimension $(\mathrm{W} \times \mathrm{H} \times \mathrm{D})$ | $175 \mathrm{~mm} \times 440 \mathrm{~mm} \times 390 \mathrm{~mm}(6.89 \mathrm{in} \times 17.32 \mathrm{in} \times 15.35 \mathrm{in})$ |
| System weight | $8.7 \mathrm{~kg}(19.18 \mathrm{lb})$ |
| Mainboard form factor | DTX compatible |
| Mainboard dimensions $(\mathrm{W} \times \mathrm{H})$ | $200 \mathrm{~mm}^{*} 244 \mathrm{~mm}, 6$ Layers |

## Environmental Requirements

| Aspect | Description |
| :--- | :--- |
| Operating temperature | 5 to $35{ }^{\circ} \mathrm{C}\left(41\right.$ to $\left.95{ }^{\circ} \mathrm{F}\right)$ |
| Non-operating temperature | Packed: -20 to $60^{\circ} \mathrm{C}\left(-4\right.$ to $\left.140{ }^{\circ} \mathrm{F}\right)$ <br> Unpacked: -10 to $60^{\circ} \mathrm{C}\left(14\right.$ to $\left.140^{\circ} \mathrm{F}\right)$ |
| Operating humidity | $-15 \%$ to $80 \% \mathrm{RH}$ non-condensing |
| Non-operating humidity | $-10 \%$ to $90 \% \mathrm{RH}$ non-condensing at $40^{\circ} \mathrm{C}$ |

## System Tour

The pictures and tables in this section illustrate the physical outlook of the computer.

## Front View



| Item | Component |
| :--- | :--- |
| 1 | Optical disc drive (ODD) |
| 2 | SD card reader |
| 3 | USB 3.1 port (Type C) |
| 4 | Microphone-in jack |
| 5 | Headphone jack |
| 6 | USB 3.0 port |
| 7 | ODD eject button |
| 8 | Wireless charger |
| 9 | Wireless charger LED |
| 10 | Power button/LED |

## Rear View



| Item | Component |
| :--- | :--- |
| 1 | Power connector |
| 2 | LAN connector |
| 3 | USB 2.0 ports |
| 4 | USB 3.1 ports |
| 5 | Microphone jack |
| 6 | Line-in jack |
| 7 | Line-out jack |
| 8 | Expansion card slots |
| 9 | Expansion card |
| 10 | Kensington lock |

## Hardware Specifications

## Processor

| Item | Specification |
| :--- | :--- |
| Socket | Socket AM4 |
| Package type | 14 nm |
| CPU type | Supports the following AMD Summit Ridge processors: <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  - AMD RYM RYZEN 7 1700 3MD RYZEN 5 1600 3.0G 16M(L3) 2400 Octa Core 65W |
|  |  |

## Chipset

| Item | Specification |
| :--- | :--- |
| System chipset | FCH: AMD Promontory B350 |
| Hardware monitor | Super I/O IT8772E-EX |

## Memory

| Item | Specification |
| :---: | :---: |
| Controller | Integrated in the AMD Summit Ridge processors |
| Number of DIMM slot | 4 |
| Maximum memory | 64GB (using four 16GB modules) |
| Data rate | 2400 MT/s |
| DIMM type | DDR4 1.2V or U-DIMMs |
| Supported capacities | 4GB, 8GB, 16GB |
| Vendor and models | - A-DATA - 4GB AM2P24HC4U1-B9QS <br> - HYNIX - 4GB HMA851U6AFR6N / 8GB HMA81GU6AFR8N <br> - KINGSTON - 8GB ACR24D4U7S8MB-8 / 16GB ACR24D4U7D8MB-16 <br> - MICRON - 4GB MTA4ATF51264AZ-2G3B1 / 8GB MTA8ATF1G64AZ2G3B1 / 16GB MTA16ATF2G64AZ-2G3B1 |
| Population rule | Please refer to "Reinstalling the Memory Modules" on page 76 for Mem Population Matrix Table. |

## Solid State Drive (SSD)

| Item | Specification |
| :--- | :--- |
| Controller | Integrated in the AMD Promontory B350 chipset |
| Number of SSD bays | 1 |
| Form factor | M.2 2280 |
| Interface | SATA 3.0 |
| Supported capacities | $256 G B$ |
| Vendor and models | Intel - 256GB SSDPEKKW256G7X1 |

## Hard Disk Drive

| Item | Specification |
| :--- | :--- |
| Controller | Integrated in the AMD Summit Ridge processors |
| Number of HDD bays | 2 |
| Form factor | 3.5 -inch or 2.5-inch |
| Interface | SATA 3.0 |
| Supported capacities | 1 TB, 2TB, 3TB |
| Vendor and models | - Seagate - ST1000DM0102 Pharaoh Oasis / ST2000DM006 Grenada BP2 <br> Refresh <br> - Toshiba - 1TB / 2TB Mars <br> • Western Digital - WD30EZRX-22D8PB0 / WD30EZRZ-22Z5HB0 |

## Optical Disc Drive

| Item | Specification |
| :--- | :--- |
| Controller | Integrated in the AMD Promontory B350 chipset |
| Type | DVD ROM/SuperMulti |
| Number of ODD bays | 2 |
| Form factor | Slim type, 9mm |
| Interface | SATA 3.0 |
| Write/read speed | $8 x$ |
| Vendor and models | • HLDS - GUE1N <br>  |

## Card Reader

| Item | Specification |
| :--- | :--- |
| Controller | RTS5143 |
| Type | SD card reader |
| Card compatibility | • SD - SanDisk 2 GB SD card |
|  | • SDHC - Transcend 4 GB SDHC card |
|  | • SDXC - Kingston 64 GB SDXC card |
|  | • mini-SD - SanDisk 1 GB Mini-SD card |
|  | • mini-SDHC - SanDisk 4 GB Mini-SDHC card |
|  | • micro-SD - Kingston 2 GB micro-SD card |
|  | • micro-SDHC - SanDisk 4 GB micro-SDHC card |

## Ethernet

| Item | Specification |
| :--- | :--- |
| Controller | Realtek RTL8111GA |
| LAN protocol | $10 / 100 / 1000 \mathrm{Mbps}$ |
| LAN connector type | RJ-45 |

## Wireless LAN

| Item | Specification |
| :--- | :--- |
| WLAN module | Intel Wireless 7265 Stonepeak AC+BT |
| Protocol | WLAN 802.11ac WLAN+Bluetooth4.0 |

## Audio

| Item | Specification |
| :--- | :--- |
| Controller | Realtek ALC662-VD 5.1 Channel High Definition Audio Codec |
| Connectors | Three audio jacks |

## SATA Interface

| Item | Specification |
| :--- | :--- |
| SATA Controller | • Integrated in the AMD Summit Ridge processors (SATA 0/1) |
| - Integrated in the AMD Promontory B350 chipset (SATA 2/3) |  |

## Keyboard and Input Devices

| Item | Specification |
| :--- | :--- |
| Controller | Super I/O ITE 8772E-EX |
| Connectors | Eight USB ports (two on front and six on rear) |

## HDMI

| Item | Specification |
| :--- | :--- |
| Controller | nVidia GTX1070/1060/1050 |
| Version | HDMI 2.0a |
| Maximum Resolution | $4096 \times 2160 @ 60 \mathrm{~Hz}$ |

## Display Port

| Item | Specification |
| :--- | :--- |
| Controller | nVidia GTX1070/1060/1050 |
| Version | DisplayPort 1.3 |
| Maximum Resolution | $4096 \times 2160 @ 60 \mathrm{~Hz}$ |

## Power Supply Unit

| Item | Specification |
| :--- | :--- |
| Type | FR 500W power supply unit (Active PFC) |
| Input | $100-240 \mathrm{~V}$ |
| Output (max.) | 500 W |
| Vendor and models | LITE-ON PS-7501-5AE 500W Active PFC 100-127V/220-240V |

