```
❯ inxi -CmGMd
Machine:
  Type: Desktop Mobo: Gigabyte model: B850 GAMING WIFI6 v: x.x
    serial: <superuser required> UEFI: American Megatrends LLC. v: F6
    date: 07/31/2025
Memory:
  System RAM: total: 32 GiB available: 30.95 GiB used: 4.84 GiB (15.6%)
  Array-1: capacity: 128 GiB slots: 4 modules: 2 EC: None
  Device-1: Channel-A DIMM 0 type: no module installed
  Device-2: Channel-A DIMM 1 type: DDR5 size: 16 GiB speed: 6400 MT/s
  Device-3: Channel-B DIMM 0 type: no module installed
  Device-4: Channel-B DIMM 1 type: DDR5 size: 16 GiB speed: 6400 MT/s
CPU:
  Info: 6-core model: AMD Ryzen 5 9600X bits: 64 type: MT MCP cache: L2: 6 MiB
  Speed (MHz): avg: 605 min/max: 605/5581 cores: 1: 605 2: 605 3: 605 4: 605
    5: 605 6: 605 7: 605 8: 605 9: 605 10: 605 11: 605 12: 605
❯ sudo nvme id-ctrl /dev/nvme1 -H | head
NVME Identify Controller:
vid       : 0x1e4b
ssvid     : 0x1e4b
sn        : 250327755180057
mn        : SPCC M.2 PCIe SSD
fr        : SN24785
rab       : 0
ieee      : 0c82d5
cmic      : 0
  [3:3] : 0      ANA not supported
❯ sudo nvme smart-log /dev/nvme1n1
Smart Log for NVME device:nvme1n1 namespace-id:ffffffff
critical_warning                        : 0
temperature                             : 43 °C (316 K)
available_spare                         : 100%
available_spare_threshold               : 1%
percentage_used                         : 1%
endurance group critical warning summary: 0
Data Units Read                         : 11671553 (5.98 TB)
Data Units Written                      : 16539729 (8.47 TB)
host_read_commands                      : 72383869
host_write_commands                     : 120090711
controller_busy_time                    : 555
power_cycles                            : 168
power_on_hours                          : 52
unsafe_shutdowns                        : 10
media_errors                            : 0
num_err_log_entries                     : 0
Warning Temperature Time                : 0
Critical Composite Temperature Time     : 0
Temperature Sensor 1                    : 43 °C (316 K)
Temperature Sensor 2                    : 35 °C (308 K)
Thermal Management T1 Trans Count       : 0
Thermal Management T2 Trans Count       : 0
Thermal Management T1 Total Time        : 0
Thermal Management T2 Total Time        : 0
❯ sudo lspci -vv | grep -P "[0-9a-f]{2}:[0-9a-f]{2}\.[0-9a-f]|LnkSta:"
...
04:00.0 Non-Volatile memory controller: MAXIO Technology (Hangzhou) Ltd. NVMe SSD Controller MAP1602
(DRAM-less) (rev 01) (prog-if 02 [NVM Express])
                LnkSta: Speed 16GT/s, Width x4
...
❯ sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:   2332 MB in  2.00 seconds = 1165.88 MB/sec
 Timing O_DIRECT disk reads: 2424 MB in  3.00 seconds = 807.94 MB/sec

❯ sudo hdparm -Tt --direct /dev/nvme1n1
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/dev/nvme1n1:
 Timing O_DIRECT cached reads:   2436 MB in  2.00 seconds = 1217.50 MB/sec
 Timing O_DIRECT disk reads: 1382 MB in  3.09 seconds = 447.65 MB/sec
> sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:    26 MB in  2.08 seconds =  12.53 MB/sec
 Timing O_DIRECT disk reads:  38 MB in  3.04 seconds =  12.52 MB/sec
> sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:    26 MB in  2.08 seconds =  12.53 MB/sec
 Timing O_DIRECT disk reads:  38 MB in  3.11 seconds =  12.24 MB/sec
> sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:    26 MB in  2.08 seconds =  12.53 MB/sec
 Timing O_DIRECT disk reads:  38 MB in  3.04 seconds =  12.52 MB/sec

> sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:    26 MB in  2.08 seconds =  12.53 MB/sec
 Timing O_DIRECT disk reads:  38 MB in  3.04 seconds =  12.52 MB/sec
> sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:    26 MB in  2.08 seconds =  12.51 MB/sec
 Timing O_DIRECT disk reads:  38 MB in  3.04 seconds =  12.52 MB/sec

> sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:   2476 MB in  2.00 seconds = 1238.03 MB/sec
 Timing O_DIRECT disk reads: 2720 MB in  3.00 seconds = 906.55 MB/sec
> sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:   2030 MB in  2.00 seconds = 1013.95 MB/sec
 Timing O_DIRECT disk reads: 2810 MB in  3.00 seconds = 936.09 MB/sec
> sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:   2076 MB in  2.00 seconds = 1037.00 MB/sec
 Timing O_DIRECT disk reads: 2722 MB in  3.00 seconds = 907.02 MB/sec

> sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:   2136 MB in  2.00 seconds = 1067.63 MB/sec
 Timing O_DIRECT disk reads: 2672 MB in  3.00 seconds = 890.47 MB/sec
> sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:   2556 MB in  2.00 seconds = 1277.25 MB/sec
 Timing O_DIRECT disk reads:  38 MB in  3.04 seconds =  12.52 MB/sec
> sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:    24 MB in  2.07 seconds =  11.57 MB/sec
 Timing O_DIRECT disk reads:  34 MB in  3.01 seconds =  11.31 MB/sec
> sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:    26 MB in  2.08 seconds =  12.53 MB/sec
 Timing O_DIRECT disk reads:  36 MB in  3.03 seconds =  11.89 MB/sec
> sudo hdparm -Tt --direct /dev/nvme1n1
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```
/dev/nvme1n1:
 Timing O_DIRECT cached reads:    26 MB in  2.08 seconds =  12.52 MB/sec
 Timing O_DIRECT disk reads:  38 MB in  3.04 seconds =  12.50 MB/sec
❯ sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:    26 MB in  2.08 seconds =  12.53 MB/sec
 Timing O_DIRECT disk reads:  38 MB in  3.04 seconds =  12.51 MB/sec
❯ sudo hdparm -Tt --direct /dev/nvme1n1
[sudo] password for marcewho:

/dev/nvme1n1:
 Timing O_DIRECT cached reads:   2386 MB in  2.00 seconds = 1192.73 MB/sec
 Timing O_DIRECT disk reads: 2510 MB in  3.00 seconds = 836.41 MB/sec
❯ sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:   2382 MB in  2.00 seconds = 1191.07 MB/sec
 Timing O_DIRECT disk reads: 2576 MB in  3.00 seconds = 858.54 MB/sec
❯ sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:   2344 MB in  2.00 seconds = 1171.97 MB/sec
 Timing O_DIRECT disk reads: 2828 MB in  3.00 seconds = 942.18 MB/sec
❯ sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:   2232 MB in  2.00 seconds = 1116.01 MB/sec
 Timing O_DIRECT disk reads: 2214 MB in  3.00 seconds = 737.86 MB/sec
❯ sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:   2086 MB in  2.00 seconds = 1042.84 MB/sec
 Timing O_DIRECT disk reads: 2446 MB in  3.00 seconds = 814.78 MB/sec
❯ sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:   2382 MB in  2.00 seconds = 1190.87 MB/sec
 Timing O_DIRECT disk reads:  38 MB in  3.04 seconds =  12.50 MB/sec
❯ sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:    24 MB in  2.25 seconds =  10.66 MB/sec
 Timing O_DIRECT disk reads:  36 MB in  3.10 seconds =  11.61 MB/sec
❯ sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:    24 MB in  2.13 seconds =  11.25 MB/sec
 Timing O_DIRECT disk reads:  34 MB in  3.05 seconds =  11.16 MB/sec
❯ sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:    24 MB in  2.25 seconds =  10.66 MB/sec
 Timing O_DIRECT disk reads:  36 MB in  3.10 seconds =  11.61 MB/sec
❯ sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:    24 MB in  2.13 seconds =  11.25 MB/sec
 Timing O_DIRECT disk reads:  34 MB in  3.05 seconds =  11.16 MB/sec
❯ sudo hdparm -Tt --direct /dev/nvme1n1

/dev/nvme1n1:
 Timing O_DIRECT cached reads:   2088 MB in  2.06 seconds = 1015.67 MB/sec
 Timing O_DIRECT disk reads: 1548 MB in  3.00 seconds = 515.31 MB/sec
❯ sudo hdparm -Tt --direct /dev/nvme1n1
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/dev/nvme1n1:
 Timing O_DIRECT cached reads:   2502 MB in  2.00 seconds = 1250.92 MB/sec
 Timing O_DIRECT disk reads: 2454 MB in  3.00 seconds = 817.67 MB/sec
❯ sudo hdparm -Tt --direct /dev/nvme1n1


/dev/nvme1n1:
 Timing O_DIRECT cached reads:   2504 MB in  2.00 seconds = 1251.15 MB/sec
 Timing O_DIRECT disk reads:  38 MB in  3.04 seconds =  12.52 MB/sec
❯ sudo hdparm -Tt --direct /dev/nvme1n1


/dev/nvme1n1:
 Timing O_DIRECT cached reads:   2148 MB in  2.00 seconds = 1073.95 MB/sec
 Timing O_DIRECT disk reads:  38 MB in  3.05 seconds =  12.46 MB/sec
❯ sudo hdparm -Tt --direct /dev/nvme1n1


/dev/nvme1n1:
 Timing O_DIRECT cached reads:    26 MB in  2.08 seconds =  12.53 MB/sec
 Timing O_DIRECT disk reads:  38 MB in  3.04 seconds =  12.52 MB/sec
❯ sudo hdparm -Tt --direct /dev/nvme1n1


/dev/nvme1n1:
 Timing O_DIRECT cached reads:   412 MB in  2.00 seconds = 205.87 MB/sec
 Timing O_DIRECT disk reads: 2602 MB in  3.00 seconds = 867.12 MB/sec
❯ sudo hdparm -Tt --direct /dev/nvme1n1


/dev/nvme1n1:
 Timing O_DIRECT cached reads:   2288 MB in  2.00 seconds = 1143.83 MB/sec
 Timing O_DIRECT disk reads: 2742 MB in  3.00 seconds = 913.55 MB/sec
~
13s 20:15:42
❯ sudo -i
[sudo] password for ......:
[root@TheStationaryCapybara ~]#
root@TheStationaryCapybara ~]# while true ; do echo 'Checking write speed:' ; dd if=/dev/zero of=/
mnt/perf-test-file bs=1M count=1024 conv=fdatasync,notrunc status=progress ; echo -e "\nFlushing
caches:" ; echo 3 > /proc/sys/vm/drop_caches ; echo -e "\nChecking read speeds:" ; dd if=/mnt/perf-
test-file of=/dev/null bs=1M count=1024 status=progress ; rm /mnt/perf-test-file ; done
Checking write speed:
976224256 bytes (976 MB, 931 MiB) copied, 5 s, 195 MB/s1073741824 bytes (1,1 GB, 1,0 GiB) copied,
5,69665 s, 188 MB/s

1024+0 records in
1024+0 records out
1073741824 bytes (1,1 GB, 1,0 GiB) copied, 7,71067 s, 139 MB/s

Flushing caches:

Checking read speeds:
267386880 bytes (267 MB, 255 MiB) copied, 22 s, 11,9 MB/s
1024+0 records in
1024+0 records out
1073741824 bytes (1,1 GB, 1,0 GiB) copied, 22,8751 s, 46,9 MB/s
Checking write speed:
1024+0 records in
1024+0 records out
1073741824 bytes (1,1 GB, 1,0 GiB) copied, 0,474302 s, 2,3 GB/s

Flushing caches:

Checking read speeds:
1024+0 records in
1024+0 records out
1073741824 bytes (1,1 GB, 1,0 GiB) copied, 0,324696 s, 3,3 GB/s
Checking write speed:
1024+0 records in
1024+0 records out
1073741824 bytes (1,1 GB, 1,0 GiB) copied, 0,381949 s, 2,8 GB/s
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Flushing caches:

Checking read speeds:
1064304640 bytes (1,1 GB, 1015 MiB) copied, 14 s, 75,4 MB/s
1024+0 records in
1024+0 records out
1073741824 bytes (1,1 GB, 1,0 GiB) copied, 14,437 s, 74,4 MB/s
Checking write speed:
1024+0 records in
1024+0 records out
1073741824 bytes (1,1 GB, 1,0 GiB) copied, 0,921059 s, 1,2 GB/s

Flushing caches:

Checking read speeds:
1055916032 bytes (1,1 GB, 1007 MiB) copied, 31 s, 34,1 MB/s
1024+0 records in
1024+0 records out
1073741824 bytes (1,1 GB, 1,0 GiB) copied, 31,0052 s, 34,6 MB/s
Checking write speed:
1024+0 records in
1024+0 records out
1073741824 bytes (1,1 GB, 1,0 GiB) copied, 0,451782 s, 2,4 GB/s

Flushing caches:

Checking read speeds:
1024+0 records in
1024+0 records out
1073741824 bytes (1,1 GB, 1,0 GiB) copied, 0,326763 s, 3,3 GB/s
Checking write speed:
1024+0 records in
1024+0 records out
1073741824 bytes (1,1 GB, 1,0 GiB) copied, 0,418139 s, 2,6 GB/s

Flushing caches:

Checking read speeds:
1024+0 records in
1024+0 records out
1073741824 bytes (1,1 GB, 1,0 GiB) copied, 0,328308 s, 3,3 GB/s
Checking write speed:
1024+0 records in
1024+0 records out
1073741824 bytes (1,1 GB, 1,0 GiB) copied, 0,428204 s, 2,5 GB/s

Flushing caches:

Checking read speeds:
1024+0 records in
1024+0 records out
1073741824 bytes (1,1 GB, 1,0 GiB) copied, 0,327473 s, 3,3 GB/s
Checking write speed:
1024+0 records in
1024+0 records out
1073741824 bytes (1,1 GB, 1,0 GiB) copied, 0,387845 s, 2,8 GB/s

Flushing caches:
^C
[root@TheStationaryCapybara ~]#
```