



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

ZTE Corporation

ZTE R5300G6 Server System
(2.0 GHz, Intel Xeon 6787P)

SPECrate®2026_fp_base = 752

SPECrate®2026_fp_peak = 770

CPU2026 License: 9061

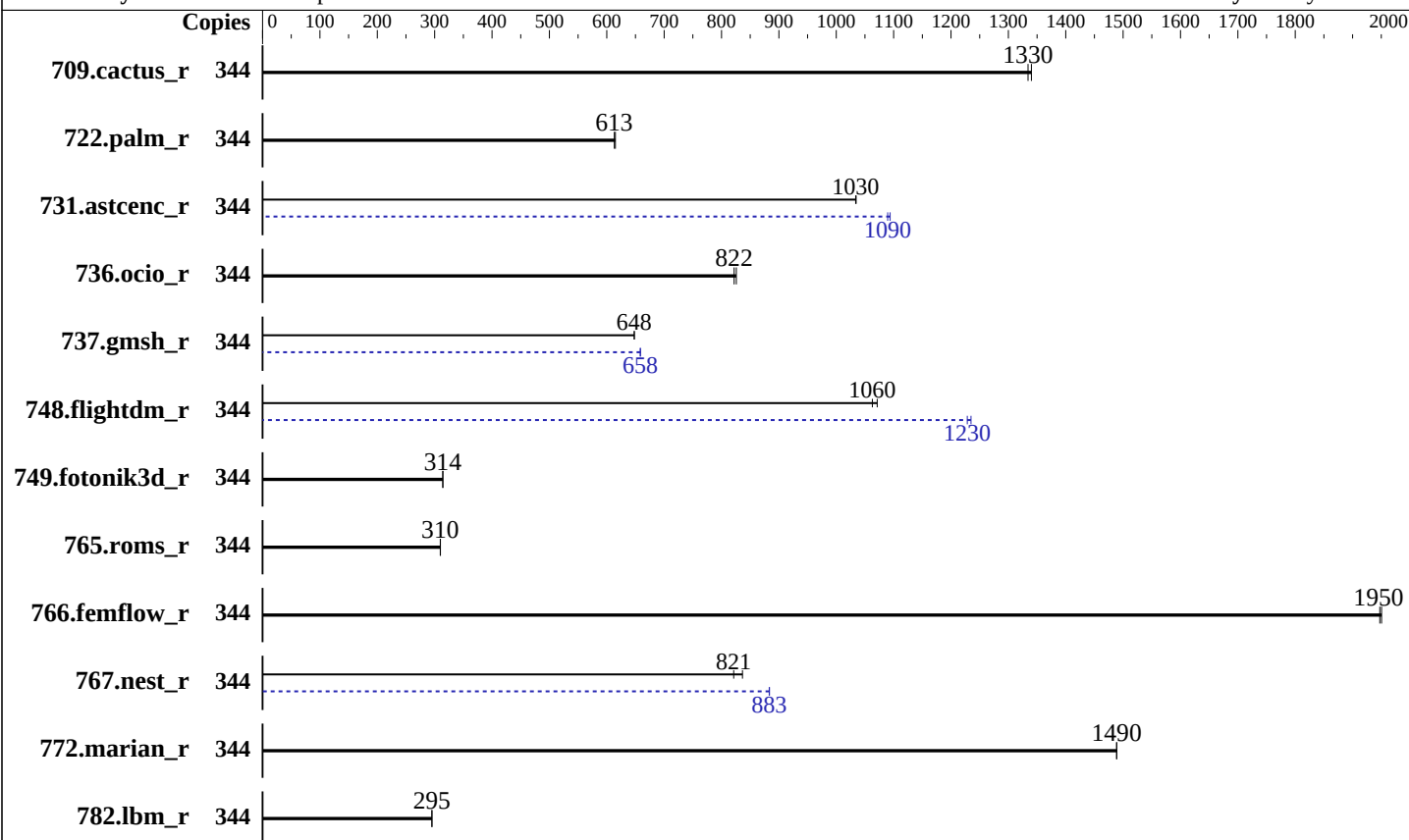
Test Sponsor: ZTE Corporation

Tested by: ZTE Corporation

Test Date: Jun-2026

Hardware Availability: May-2025

Software Availability: May-2026



Hardware

CPU Name: Intel Xeon 6787P
Max MHz: 3800
Nominal: 2000
Enabled: 172 cores, 2 chips, 2 threads/core
Orderable: 1,2 chips
Cache L1: 64 KB I + 48 KB D on chip per core
L2: 2 MB I+D on chip per core
L3: 336 MB I+D on chip per chip
Other: None
Memory: 1 TB (16 x 64 GB 4Rx8 PC5-88/64B-M, running at 8000)
Storage: 1 x 3.84 TB NVME SSD
Cooling: Air
Other: None

Software

OS: SUSE Linux Enterprise Server 15 SP6 6.4.0-150600.21-default
Compiler: C/C++: Version 2026.0 of Intel oneAPI DPC++/C++ Compiler for Linux;
Fortran: Version 2026.0 of Intel Fortran Compiler for Linux
Compiler Category: Vendor
Firmware: Version 05.25.03.11 released Aug-2025
File System: ext4
System State: Run level 3 (multi-user)
Base Pointers: 64-bit
Peak Pointers: 64-bit
Other: jemalloc memory allocator v5.3
Power Management: BIOS and OS set to prefer performance at the cost of additional power usage



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

ZTE Corporation

ZTE R5300G6 Server System
(2.0 GHz, Intel Xeon 6787P)

SPECrate®2026_fp_base = 752

SPECrate®2026_fp_peak = 770

CPU2026 License: 9061

Test Sponsor: ZTE Corporation

Tested by: ZTE Corporation

Test Date: Jun-2026

Hardware Availability: May-2025

Software Availability: May-2026

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
709.cactus_r	344	220	1340	<u>221</u>	<u>1330</u>			344	220	1340	<u>221</u>	<u>1330</u>		
722.palm_r	344	738	615	<u>741</u>	<u>613</u>			344	738	615	<u>741</u>	<u>613</u>		
731.astcenc_r	344	<u>280</u>	<u>1030</u>	279	1030			344	264	1090	<u>265</u>	<u>1090</u>		
736.ocio_r	344	365	826	<u>366</u>	<u>822</u>			344	365	826	<u>366</u>	<u>822</u>		
737.gmsh_r	344	244	648	<u>244</u>	<u>648</u>			344	<u>240</u>	<u>658</u>	240	659		
748.flightdm_r	344	<u>232</u>	<u>1060</u>	230	1070			344	<u>201</u>	<u>1230</u>	199	1230		
749.fotonik3d_r	344	1265	314	<u>1266</u>	<u>314</u>			344	1265	314	<u>1266</u>	<u>314</u>		
765.roms_r	344	1748	310	<u>1749</u>	<u>310</u>			344	1748	310	<u>1749</u>	<u>310</u>		
766.femflow_r	344	<u>259</u>	<u>1950</u>	259	1950			344	<u>259</u>	<u>1950</u>	259	1950		
767.nest_r	344	326	837	<u>332</u>	<u>821</u>			344	<u>309</u>	<u>883</u>	309	884		
772.marian_r	344	365	1490	<u>365</u>	<u>1490</u>			344	365	1490	<u>365</u>	<u>1490</u>		
782.lbm_r	344	<u>668</u>	<u>295</u>	668	295			344	<u>668</u>	<u>295</u>	668	295		

SPECrate®2026_fp_base = 752

SPECrate®2026_fp_peak = 770

Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

Submit Notes

The numactl mechanism was used to bind copies to processors. The config file option 'submit' was used to generate numactl commands to bind each copy to a specific processor. For details, please see the config file.

Operating System Notes

Stack size set to unlimited using "ulimit -s unlimited"
OS set to performance mode via cpupower frequency-set -g performance

Environment Variables Notes

Environment variables set by runcpu before the start of the run:
LD_LIBRARY_PATH = "/nhome/cpu2026/lib"
MALLOC_CONF = "retain:true"

General Notes

Binaries compiled on a system with 2x Intel Xeon Platinum 8280M CPU + 384GB RAM memory using CentOS Stream 9.
Transparent Huge Pages enabled by default
Prior to runcpu invocation
Filesystem page cache synced and cleared with:

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

ZTE Corporation

ZTE R5300G6 Server System
(2.0 GHz, Intel Xeon 6787P)

SPECrate®2026_fp_base = 752

SPECrate®2026_fp_peak = 770

CPU2026 License: 9061

Test Sponsor: ZTE Corporation

Tested by: ZTE Corporation

Test Date: Jun-2026

Hardware Availability: May-2025

Software Availability: May-2026

General Notes (Continued)

sync; echo 3> /proc/sys/vm/drop_caches
runcpu command invoked through numactl i.e.:
numactl --interleave=all runcpu <etc>
jemalloc, a general purpose malloc implementation
built with the CentOS Stream 9, and the system compiler gcc 11.5.0
sources available from jemalloc.net or <https://github.com/jemalloc/jemalloc/releases>

Platform Notes

BIOS Configuration:
LLC dead line alloc set to Disabled
Patrol Scrub set to Disabled
Intel VT for Directed I/O (VT-d) set to Disabled
Hardware P-states set to Disable
Sub NUMA(SNC) set to Enable

Sysinfo program /nhome/cpu2026/bin/sysinfo
Rev: 779ab21020787073335a329f3a45e2cd
running on localhost Mon Jun 22 10:28:43 2026

SUT (System Under Test) info as seen by some common utilities.

----- Table of contents -----

1. uname -srv
2. w
3. Username
4. ulimit -a
5. sysinfo process ancestry
6. /proc/cpuinfo
7. lscpu
8. numactl --hardware
9. /proc/meminfo
10. who -r
11. Systemd service manager version: systemd 254 (254.10+suse.84.ge8d77af424)
12. Services, from systemctl list-unit-files
13. Linux kernel boot-time arguments, from /proc/cmdline
14. cpupower frequency-info
15. tuned-adm active
16. sysctl
17. /sys/kernel/mm/transparent_hugepage
18. /sys/kernel/mm/transparent_hugepage/khugepaged
19. OS release
20. Disk information
21. /sys/devices/virtual/dmi/id

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

ZTE Corporation

ZTE R5300G6 Server System
(2.0 GHz, Intel Xeon 6787P)

SPECrate®2026_fp_base = 752

SPECrate®2026_fp_peak = 770

CPU2026 License: 9061

Test Sponsor: ZTE Corporation

Tested by: ZTE Corporation

Test Date: Jun-2026

Hardware Availability: May-2025

Software Availability: May-2026

Platform Notes (Continued)

22. dmidecode

23. BIOS

1. uname -srvrn

Linux 6.4.0-150600.21-default #1 SMP PREEMPT_DYNAMIC Thu May 16 11:09:22 UTC 2024 (36c1e09/lp) x86_64

2. w

10:28:43 up 25 min, 3 users, load average: 0.00, 0.02, 0.04

USER	TTY	FROM	LOGIN@	IDLE	JCPU	PCPU	WHAT
root	pts/0	192.2.223.15	10:22	11.00s	1.45s	0.01s	-bash
root	pts/1	192.2.223.15	10:22	6:21	0.07s	0.07s	-bash
root	pts/2	192.2.223.15	10:22	6:20	0.06s	0.06s	-bash

3. Username

From environment variable \$USER: root

4. ulimit -a

core file size	(blocks, -c)	unlimited
data seg size	(kbytes, -d)	unlimited
scheduling priority	(-e)	0
file size	(blocks, -f)	unlimited
pending signals	(-i)	4124045
max locked memory	(kbytes, -l)	8192
max memory size	(kbytes, -m)	unlimited
open files	(-n)	1024
pipe size	(512 bytes, -p)	8
POSIX message queues	(bytes, -q)	819200
real-time priority	(-r)	0
stack size	(kbytes, -s)	unlimited
cpu time	(seconds, -t)	unlimited
max user processes	(-u)	4124045
virtual memory	(kbytes, -v)	unlimited
file locks	(-x)	unlimited

5. sysinfo process ancestry

```
/usr/lib/systemd/systemd --switched-root --system --deserialize=42 3
sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups
sshd: root [priv]
sshd: root@pts/0
-bash
-bash
```

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

ZTE Corporation

ZTE R5300G6 Server System
(2.0 GHz, Intel Xeon 6787P)

SPECrate®2026_fp_base = 752

SPECrate®2026_fp_peak = 770

CPU2026 License: 9061

Test Sponsor: ZTE Corporation

Tested by: ZTE Corporation

Test Date: Jun-2026

Hardware Availability: May-2025

Software Availability: May-2026

Platform Notes (Continued)

```
runcpu --nobuild --reportable --action validate --define default-platform-flags --copies 344 -c
ic2026.0-graniterapids-cpu2026-1.0.1-rate-20260429.cfg --define smt-on --define cores=172 --define
physicalfirst --define invoke_with_interleave --define drop_caches --tune base,peak -o all fprate
runcpu --nobuild --reportable --action validate --define default-platform-flags --copies 344 --configfile
ic2026.0-graniterapids-cpu2026-1.0.1-rate-20260429.cfg --define smt-on --define cores=172 --define
physicalfirst --define invoke_with_interleave --define drop_caches --tune base,peak --output_format all
--nopower --runmode rate --tune base:peak --size refrate fprate --nopreenv --note-preenv --logfile
$SPEC/tmp/CPU2026.063/templogs/preenv.fprate.063.0.log --lognum 063.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /nhome/cpu2026
```

6. /proc/cpuinfo

```
model name      : Intel(R) Xeon(R) 6787P
vendor_id       : GenuineIntel
cpu family      : 6
model           : 173
stepping        : 1
microcode       : 0x10003c2
bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs bhi
cpu cores       : 86
siblings        : 172
2 physical ids (chips)
344 processors (hardware threads)
physical id 0:  core ids 0-42,64-106
physical id 1:  core ids 0-42,64-106
physical id 0:  apicids 0-85,128-213
physical id 1:  apicids 256-341,384-469
```

Caution: /proc/cpuinfo data regarding chips, cores, and threads is not necessarily reliable, especially for virtualized systems. Use the above data carefully.

7. lscpu

From lscpu from util-linux 2.39.3:

```
Architecture:      x86_64
CPU op-mode(s):    32-bit, 64-bit
Address sizes:      46 bits physical, 57 bits virtual
Byte Order:         Little Endian
CPU(s):             344
On-line CPU(s) list: 0-343
Vendor ID:          GenuineIntel
BIOS Vendor ID:     Intel(R) Corporation
Model name:         Intel(R) Xeon(R) 6787P
BIOS Model name:    Intel(R) Xeon(R) 6787P   CPU @ 2.0GHz
BIOS CPU family:    179
CPU family:         6
```

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

ZTE Corporation

ZTE R5300G6 Server System
(2.0 GHz, Intel Xeon 6787P)

SPECrate®2026_fp_base = 752

SPECrate®2026_fp_peak = 770

CPU2026 License: 9061

Test Sponsor: ZTE Corporation

Tested by: ZTE Corporation

Test Date: Jun-2026

Hardware Availability: May-2025

Software Availability: May-2026

Platform Notes (Continued)

Model: 173
Thread(s) per core: 2
Core(s) per socket: 86
Socket(s): 2
Stepping: 1
CPU(s) scaling MHz: 23%
CPU max MHz: 3800.0000
CPU min MHz: 800.0000
BogoMIPS: 4000.00

Flags:

fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat
pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx
pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts rep_good
nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni
pclmulqdq dtes64 monitor ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16
xtpr pdcm pcid dca sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm
3dnowprefetch cpuid_fault epb cat_l3 cat_l2 cdp_l3 intel_ppin cdp_l2
ssbd mba ibrs ibpb stibp ibrs_enhanced tpr_shadow flexpriority ept
vpid ept_ad fsgsbase tsc_adjust bmi1 hle avx2 smep bmi2 erms invpcid
rtm cqm rdt_a avx512f avx512dq rdseed adx smap avx512ifma clflushopt
clwb intel_pt avx512cd sha_ni avx512bw avx512vl xsaveopt xsavec
xgetbv1 xsaves cqm_llc cqm_occup_llc cqm_mbm_total cqm_mbm_local
split_lock_detect user_shstk avx_vnni avx512_bf16 wbnoinvd dtherm ida
arat pln pts hwp hwp_act_window hwp_epp hwp_pkg_req vnmi avx512vbmi
umip pku ospke waitpkg avx512_vbmi2 gfni vaes vpclmulqdq avx512_vnni
avx512_bitalg tme avx512_vpopcntdq la57 rdpid bus_lock_detect
cldemote movdiri movdir64b enqcmd fsrm md_clear serialize tsxldtrk
pconfig arch_lbr ibt amx_bf16 avx512_fp16 amx_tile amx_int8 flush_l1d
arch_capabilities

Virtualization: VT-x
L1d cache: 8.1 MiB (172 instances)
L1i cache: 10.8 MiB (172 instances)
L2 cache: 344 MiB (172 instances)
L3 cache: 672 MiB (2 instances)
NUMA node(s): 4
NUMA node0 CPU(s): 0-42,172-214
NUMA node1 CPU(s): 43-85,215-257
NUMA node2 CPU(s): 86-128,258-300
NUMA node3 CPU(s): 129-171,301-343
Vulnerability Gather data sampling: Not affected
Vulnerability Itlb multihit: Not affected
Vulnerability L1tf: Not affected
Vulnerability Mds: Not affected
Vulnerability Meltdown: Not affected
Vulnerability Mmio stale data: Not affected
Vulnerability Reg file data sampling: Not affected
Vulnerability Retbleed: Not affected

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

ZTE Corporation

ZTE R5300G6 Server System
(2.0 GHz, Intel Xeon 6787P)

SPECrate®2026_fp_base = 752

SPECrate®2026_fp_peak = 770

CPU2026 License: 9061

Test Sponsor: ZTE Corporation

Tested by: ZTE Corporation

Test Date: Jun-2026

Hardware Availability: May-2025

Software Availability: May-2026

Platform Notes (Continued)

Vulnerability Spec rstack overflow: Not affected
Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl
Vulnerability Spectre v1: Mitigation; usercopy/swapgs barriers and __user pointer sanitization
Vulnerability Spectre v2: Mitigation; Enhanced / Automatic IBRS; IBPB conditional; RSB filling; PBRSE-eIBRS Not affected; BHI BHI_DIS_S
Vulnerability Srbds: Not affected
Vulnerability Tsx async abort: Not affected

From lscpu --cache:

NAME	ONE-SIZE	ALL-SIZE	WAYS	TYPE	LEVEL	SETS	PHY-LINE	COHERENCY-SIZE
L1d	48K	8.1M	12	Data	1	64	1	64
L1i	64K	10.8M	16	Instruction	1	64	1	64
L2	2M	344M	16	Unified	2	2048	1	64
L3	336M	672M	16	Unified	3	344064	1	64

8. numactl --hardware

NOTE: a numactl 'node' might or might not correspond to a physical chip.

```
available: 4 nodes (0-3)
node 0 cpus: 0-42,172-214
node 0 size: 257429 MB
node 0 free: 256411 MB
node 1 cpus: 43-85,215-257
node 1 size: 258025 MB
node 1 free: 255867 MB
node 2 cpus: 86-128,258-300
node 2 size: 258025 MB
node 2 free: 256988 MB
node 3 cpus: 129-171,301-343
node 3 size: 257561 MB
node 3 free: 256674 MB
node distances:
node  0  1  2  3
0:  10  12  21  21
1:  12  10  21  21
2:  21  21  10  12
3:  21  21  12  10
```

9. /proc/meminfo

MemTotal: 1055787224 kB

10. who -r

run-level 3 Jun 22 10:04

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

ZTE Corporation

ZTE R5300G6 Server System
(2.0 GHz, Intel Xeon 6787P)

SPECrate®2026_fp_base = 752

SPECrate®2026_fp_peak = 770

CPU2026 License: 9061

Test Sponsor: ZTE Corporation

Tested by: ZTE Corporation

Test Date: Jun-2026

Hardware Availability: May-2025

Software Availability: May-2026

Platform Notes (Continued)

11. Systemd service manager version: systemd 254 (254.10+suse.84.ge8d77af424)

Default Target	Status
multi-user	running

12. Services, from systemctl list-unit-files

STATE	UNIT FILES
-------	------------

enabled	ModemManager NetworkManager NetworkManager-dispatcher YaST2-Firstboot YaST2-Second-Stage apparmor appstream-sync-cache auditd bluetooth cron display-manager getty@ irqbalance issue-generator kbdsettings kdump kdump-early kdump-notify klog lvm2-monitor nginx nsd postfix purge-kernels rollback rsyslog smartd sshd systemd-pstore wicked wickedd-auto4 wickedd-dhcp4 wickedd-dhcp6 wickedd-nanny wpa_supplicant
---------	---

enabled-runtime	systemd-remount-fs
-----------------	--------------------

disabled	NetworkManager-wait-online accounts-daemon autofs autoyast-initscripts blk-availability bluetooth-mesh boot-sysctl ca-certificates chrony-wait chronyd console-getty cups cups-browsed debug-shell dmraid-activation dnsmasq ebttables exchange-bmc-os-info firewallld fsidd gpm grub2-once haveged ipmi ipmievd issue-add-ssh-keys kexec-load ksm kvm_stat lunmask man-db-create multipathd nfs nfs-blkmap nmb openvpn@ ostree-remount rpcbind rpmconfigcheck rsyncd rtkit-daemon serial-getty@ smartd-generate_opts smb snmpd snmptrapd speech-dispatcherd systemd-boot-check-no-failures systemd-confext systemd-network-generator systemd-sysext systemd-time-wait-sync systemd-timesyncd tuned udisks2 update-system-flatpaks upower vncserver@ wpa_supplicant@
indirect	pcscd saned@ systemd-userdbd wickedd

13. Linux kernel boot-time arguments, from /proc/cmdline

BOOT_IMAGE=/boot/vmlinuz-6.4.0-150600.21-default
root=UUID=340a3597-b723-40ec-9271-f634cfe77411
splash=silent
resume=/dev/disk/by-uuid/63163e0d-6dab-4d02-90fb-3a6f9615eeab
mitigations=auto
quiet
security=apparmor
crashkernel=383M,high
crashkernel=72M,low
3
iomem=relaxed

14. cpupower frequency-info

analyzing CPU 70:

current policy: frequency should be within 800 MHz and 3.80 GHz.
The governor "performance" may decide which speed to use within this range.

boost state support:

Supported: yes

Active: yes

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

ZTE Corporation

ZTE R5300G6 Server System
(2.0 GHz, Intel Xeon 6787P)

SPECrate®2026_fp_base = 752

SPECrate®2026_fp_peak = 770

CPU2026 License: 9061

Test Sponsor: ZTE Corporation

Tested by: ZTE Corporation

Test Date: Jun-2026

Hardware Availability: May-2025

Software Availability: May-2026

Platform Notes (Continued)

15. tuned-adm active

It seems that tuned daemon is not running, preset profile is not activated.
Preset profile: throughput-performance

16. sysctl

kernel.numa_balancing	1
kernel.randomize_va_space	2
vm.compaction_proactiveness	20
vm.dirty_background_bytes	0
vm.dirty_background_ratio	10
vm.dirty_bytes	0
vm.dirty_expire_centisecs	3000
vm.dirty_ratio	20
vm.dirty_writeback_centisecs	500
vm.dirtytime_expire_seconds	43200
vm.extfrag_threshold	500
vm.min_unmapped_ratio	1
vm.nr_hugepages	0
vm.nr_hugepages_mempolicy	0
vm.nr_overcommit_hugepages	0
vm.swappiness	60
vm.watermark_boost_factor	15000
vm.watermark_scale_factor	10
vm.zone_reclaim_mode	0

17. /sys/kernel/mm/transparent_hugepage

defrag	always	defer	defer+madvise	[madvise]	never
enabled	[always] madvise never				
hpage_pmd_size	2097152				
shmem_enabled	always	within_size	advise	[never]	deny force

18. /sys/kernel/mm/transparent_hugepage/khugepaged

alloc_sleep_millisecs	60000
defrag	1
max_ptes_none	511
max_ptes_shared	256
max_ptes_swap	64
pages_to_scan	4096
scan_sleep_millisecs	10000

19. OS release

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

ZTE Corporation

ZTE R5300G6 Server System
(2.0 GHz, Intel Xeon 6787P)

SPECrate®2026_fp_base = 752

SPECrate®2026_fp_peak = 770

CPU2026 License: 9061

Test Sponsor: ZTE Corporation

Tested by: ZTE Corporation

Test Date: Jun-2026

Hardware Availability: May-2025

Software Availability: May-2026

Platform Notes (Continued)

From /etc/*-release /etc/*-version
os-release SUSE Linux Enterprise Server 15 SP6

20. Disk information

SPEC is set to: /nhome/cpu2026

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
/dev/mapper/vg_data-lv_data	ext4	1.8T	241G	1.5T	14%	/nhome

21. /sys/devices/virtual/dmi/id

Vendor: ZTE
Product: R5300 G6
Product Family: Server
Serial: 219587958508

22. dmidecode

Additional information from dmidecode 3.4 follows. WARNING: Use caution when you interpret this section. The 'dmidecode' program reads system data which is "intended to allow hardware to be accurately determined", but the intent may not be met, as there are frequent changes to hardware, firmware, and the "DMTF SMBIOS" standard.

Memory:

4x Hynix HMC98BDJHA380N 64 GB 4 rank 8800, configured at 8000
4x Hynix HMC98BDJHA383N 64 GB 4 rank 8800, configured at 8000
4x Hynix HMC98BDJHA462N 64 GB 4 rank 8800, configured at 8000
4x Hynix HMC98BDJHA464N 64 GB 4 rank 8800, configured at 8000

23. BIOS

(This section combines info from /sys/devices and dmidecode.)

BIOS Vendor: American Megatrends Inc.
BIOS Version: 05.25.03.11
BIOS Date: 08/19/2025
BIOS Revision: 5.25

Compiler Version Notes

C | 782.lbm_r(base, peak)

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
Version 2026.0.0 Build 20260331
Copyright (C) 1985-2026 Intel Corporation. All rights reserved.

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

ZTE Corporation

ZTE R5300G6 Server System
(2.0 GHz, Intel Xeon 6787P)

SPECrate®2026_fp_base = 752

SPECrate®2026_fp_peak = 770

CPU2026 License: 9061

Test Sponsor: ZTE Corporation

Tested by: ZTE Corporation

Test Date: Jun-2026

Hardware Availability: May-2025

Software Availability: May-2026

Compiler Version Notes (Continued)

```
=====
C++      | 731.astcenc_r(base, peak) 736.ocio_r(base, peak)
          | 748.flightdm_r(base, peak) 766.femflow_r(base, peak)
          | 767.nest_r(base, peak) 772.marian_r(base, peak)
-----
```

```
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
Version 2026.0.0 Build 20260331
Copyright (C) 1985-2026 Intel Corporation. All rights reserved.
-----
```

```
=====
C++, C   | 709.cactus_r(base, peak) 737.gmsh_r(base, peak)
-----
```

```
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
Version 2026.0.0 Build 20260331
Copyright (C) 1985-2026 Intel Corporation. All rights reserved.
-----
```

```
=====
Fortran  | 722.palm_r(base, peak) 749.fotonik3d_r(base, peak) 765.roms_r(base,
          | peak)
-----
```

```
Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version
2026.0.0 Build 20260331
Copyright (C) 1985-2026 Intel Corporation. All rights reserved.
-----
```

Base Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Fortran benchmarks:

ifx

Benchmarks using both C and C++:

icpx icx



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

ZTE Corporation

ZTE R5300G6 Server System
(2.0 GHz, Intel Xeon 6787P)

SPECrate®2026_fp_base = 752

SPECrate®2026_fp_peak = 770

CPU2026 License: 9061

Test Sponsor: ZTE Corporation

Tested by: ZTE Corporation

Test Date: Jun-2026

Hardware Availability: May-2025

Software Availability: May-2026

Base Portability Flags

737.gmsh_r: -fno-associative-math

Base Optimization Flags

C benchmarks:

-m64 -std=c18 -Wl,-z,muldefs -Wl,-plugin-opt=-inline-threshold=1500
-xgraniterapids -mprefer-vector-width=512 -O3 -ffp-model=fast -flto
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-L/usr/local/jemalloc-5.3.0/lib -ljemalloc

C++ benchmarks:

-m64 -std=c++17 -Wl,-z,muldefs -Wl,-plugin-opt=-inline-threshold=1500
-xgraniterapids -mprefer-vector-width=512 -O3 -ffp-model=fast -flto
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-L/usr/local/jemalloc-5.3.0/lib -ljemalloc

Fortran benchmarks:

-m64 -stand f18 -Wl,-z,muldefs -Wl,-plugin-opt=-inline-threshold=1500
-xgraniterapids -mprefer-vector-width=512 -O3 -ffp-model=fast -flto
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-nostandard-realloc-lhs -align array32byte -auto
-L/usr/local/jemalloc-5.3.0/lib -ljemalloc

Benchmarks using both C and C++:

-m64 -std=c++17 -std=c18 -Wl,-z,muldefs
-Wl,-plugin-opt=-inline-threshold=1500 -xgraniterapids
-mprefer-vector-width=512 -O3 -ffp-model=fast -flto -mfpmath=sse
-funroll-loops -qopt-mem-layout-trans=4 -L/usr/local/jemalloc-5.3.0/lib
-ljemalloc

Peak Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Fortran benchmarks:

ifx

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

ZTE Corporation

ZTE R5300G6 Server System
(2.0 GHz, Intel Xeon 6787P)

SPECrate®2026_fp_base = 752

SPECrate®2026_fp_peak = 770

CPU2026 License: 9061

Test Sponsor: ZTE Corporation

Tested by: ZTE Corporation

Test Date: Jun-2026

Hardware Availability: May-2025

Software Availability: May-2026

Peak Compiler Invocation (Continued)

Benchmarks using both C and C++:

icpx icx

Peak Portability Flags

737.gmsh_r: -fno-associative-math

Peak Optimization Flags

C benchmarks:

782.lbm_r: basepeak = yes

C++ benchmarks:

731.astcenc_r: -m64 -std=c++17 -wl, -z, muldefs
-wl, -plugin-opt=-inline-threshold=1500
-fprofile-generate(pass 1)
-fprofile-use=default.profddata(pass 2) -xHost(pass 1)
-ffp-model=fast -xgraniterapids(pass 2) -flto
-mprefer-vector-width=512 -qopt-mem-layout-trans=4 -O3
-mfpmath=sse -funroll-loops
-L/usr/local/jemalloc-5.3.0/lib -ljemalloc

736.ocio_r: basepeak = yes

748.flightdm_r: Same as 731.astcenc_r

766.femflow_r: basepeak = yes

767.nest_r: Same as 731.astcenc_r

772.marian_r: basepeak = yes

Fortran benchmarks:

722.palm_r: basepeak = yes

749.fotonik3d_r: basepeak = yes

765.roms_r: basepeak = yes

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

ZTE Corporation

ZTE R5300G6 Server System
(2.0 GHz, Intel Xeon 6787P)

SPECrate®2026_fp_base = 752

SPECrate®2026_fp_peak = 770

CPU2026 License: 9061

Test Sponsor: ZTE Corporation

Tested by: ZTE Corporation

Test Date: Jun-2026

Hardware Availability: May-2025

Software Availability: May-2026

Peak Optimization Flags (Continued)

Benchmarks using both C and C++:

709.cactus_r: basepeak = yes

```
737.gmsh_r: -m64 -std=c++17 -std=c18 -wl, -z, muldefs  
-wl, -plugin-opt=-inline-threshold=1500  
-fprofile-generate(pass 1)  
-fprofile-use=default.profdata(pass 2) -xHost(pass 1)  
-ffp-model=fast -xgraniterapids(pass 2) -flto  
-mprefer-vector-width=512 -qopt-mem-layout-trans=4 -O3  
-mfpmath=sse -funroll-loops  
-L/usr/local/jemalloc-5.3.0/lib -ljemalloc
```

The flags files that were used to format this result can be browsed at

<http://www.spec.org/cpu2026/results/flags/Intel-ic2025-official-linux64.html>

<http://www.spec.org/cpu2026/results/flags/ZTE-Platform-Settings-GNR-V2.1.html>

You can also download the XML flags sources by saving the following links:

<http://www.spec.org/cpu2026/results/flags/Intel-ic2025-official-linux64.xml>

<http://www.spec.org/cpu2026/results/flags/ZTE-Platform-Settings-GNR-V2.1.xml>

SPEC CPU and SPECrate are registered trademarks of the Standard Performance Evaluation Corporation. All other brand and product names appearing in this result are trademarks or registered trademarks of their respective holders.

For questions about this result, please contact the tester. For other inquiries, please contact info@spec.org.

Tested with SPEC CPU®2026 v1.0.1 on 2026-06-21 22:28:42-0400.

Report generated on 2026-08-11 15:38:59 by CPU2026 PDF formatter (unknown).

Originally published on 2026-08-06.