Oracle Processor Core Factor Table

Effective Date: March 16, 2009
Updated: Jan 28, 2026

Vendor and Processor	Core Processor Licensing Factor
Sun and Fujitsu UltraSPARC T1 processor (1.0 or 1.2 GHz) **Only named servers including:** Sun Fire T1000 Server, SPARC Enterprise T1000 Server*, with 6 or 8-core 1.0 GHz UltraSPARC T1 processor Sun Fire T2000 Server, SPARC Enterprise T2000 Server*, with 4, 6, or 8-core 1.0 GHz, or 8 core 1.2 GHz UltraSPARC T1 processor	0.25
Sun Netra T2000, 1.0 or 1.2 GHz UltraSPARC T1 processor	0.25
SPARC T3 processor	0.25
Ampere: Altra/AltraMax and AmpereOne	0.25
All other ARM	1.0
Sun and Fujitsu UltraSPARC T1 1.4 GHz **Only named servers including:** Sun Fire T2000 Server and SPARC Enterprise T2000 Server*, with 8-core, 1.4 GHz UltraSPARC T1 processor	0.5
Sun T6300, 1.4 GHz UltraSPARC T1 processor	0.5
AMD EPYC™ 9005, 9004, 8004, 7003, 7002, 7001, 4005, 4004 Series AMD Opteron™ 6300, 6200, 6100, 4300, 3300, 3200 Series or earlier Multicore chips	0.5
Intel® Xeon® Processors: 69xxP, 67xxE, 67xxP, 65xxP, 69xxP, 67xxE, 67xxP, 65xxP, 63xxP 69xxP-B, 67xxP-B, 65xxP-B, 63xxP-B Platinum 92xx, Platinum HPC MAX 94xx, Platinum 8592/Q/V/+, Platinum 85xx/H/N/P/Q/U/V/Y/+, Platinum 84xx/+/H/N/P/Q/V/Y/Y+, Platinum 83xxH/HL/M/P/Q/S/V/Y, Platinum 82xx, Platinum 81xx, Gold 65xx/S/N/Q/Y/+, Gold 64xx/+/H/M/N/Q/S/U/Y/Y+, Gold 62xx, Gold 63xxH/HL/N/T/Y, Gold 61xx, Gold 55xx/U/+, Gold 54xx/+/N/S/U/Y, Gold 53xx/H/S/T/Y/N, Gold 52xx, Gold 51xx, Silver 45xx/T/Y/+, Silver 44xx/T/Y/+, Silver 43xx/T/Y, Silver 42xx, Silver 41xx, Bronze 35xxU, Bronze 34xxU, Bronze 32xx, Bronze 31xx E-24xx, E-23xx/G, E-22xx/G, E-21xx/G E7-88xx/v2/v3/v4, E7-48xx/v2/v3/v4, E7-28xx/v2, E5-46xx/v2/v3/v4, E5-26xx/v2/v3/v4, E5-24xx/v2/v3, E5-14xx-v2/v3, E3-15xx-v5/v6, E3-12xx/v2/v3/v4/v5/v6, E5-16xx/v2/v3/v4 (and earlier multicore chips) E75xx/L75xx/X75xx, E65xx/X65xx, E56xx/L56xx/X56xx, X55xx, E54xx/X54xx, X34xx, 51xx	0.5
Intel Itanium Series 93XX or earlier Multicore chips *(For servers purchased prior to Dec 1st, 2010)*	0.5
Intel or AMD Desktop, Laptop/Notebook, or Netbook Multicore chips	0.5
Sun UltraSPARC T2+	0.5
SPARC64 VII+	0.5
SPARC64 X, SPARC64 X+, SPARC64 XII	0.5
SPARC T4 processor	0.5
SPARC T5	0.5
SPARC M5, SPARC M6, SPARC M7, SPARC M8	0.5
SPARC S7	0.5
Sun and Fujitsu SPARC64 VI, VII	0.75
Sun UltraSPARC IV, IV+, or earlier Multicore chips	0.75
Sun UltraSPARC T2	0.75
HP PA-RISC	0.75
IBM POWER5+ or earlier Multicore chips	0.75
All Single Core Chips	1.0
Intel Itanium Series 93XX *(For servers purchased on or after Dec 1st, 2010)*	1.0
Intel Itanium Series 95XX	1.0
IBM POWER6	1.0
IBM POWER7, IBM POWER7+	1.0
IBM POWER8, POWER9, POWER10	1.0
IBM Z (z16, z15, z14, z13, z(EC)12, z196, z11, z10 and earlier)	1.0
All Other Multicore chips	1.0

* SPARC Enterprise T1000 and SPARC Enterprise T2000 Servers may be sold and branded by Oracle, Sun Microsystems, Fujitsu or Fujitsu Siemens.

Important Notes

Running Oracle Licenses in the Oracle Cloud and Oracle Compute Cloud@Customer
When installing and deploying perpetual or term licenses in the Oracle Cloud, including Oracle Compute Cloud@Customer, for example, installing and running Oracle SOA Suite for Oracle Middleware licenses on Oracle Java Cloud Service (see list of certified programs in the Oracle Cloud documentation), you must have a sufficient number of licenses to cover your use in the Oracle Cloud.

For this purpose, the following ratios of Processor licenses to Oracle Cloud usage applies: For running on the x86 platform, every one (1) Processor license covers use of the program on two (2) OCPUs. For running on the Ampere (Altra/AltraMax and AmpereOne) platform, every one (1) Processor license covers use of the program on four (4) OCPUs. For deploying Named User Plus (NUP) licenses in the Oracle Cloud, you must always have a sufficient number of NUP licenses to cover your use of the program in the Cloud. This means you must have the greater of: a) the actual number of users, or b) the minimum number of NUP licenses per Processor. For programs with a license minimum of 25 NUP per Processor, you must have a minimum of 25 NUP licenses for every two (2) OCPUs of x86 or four (4) OCPUs of Ampere (Altra/AltraMax and AmpereOne), and for programs with a license minimum of 10 NUP per Processor, you must have a minimum of 10 NUP licenses for every two (2) OCPUs of x86 or four (4) OCPUs of Ampere (Altra/AltraMax and AmpereOne).

For the purposes of deploying your licenses on Oracle Ravello, every one (1) Processor license covers the use of the program on 4vCPUs (equivalent to two (2) Ravello R1 or R2 compute units). For the purposes of deploying Standard Edition, Standard Edition One or Standard Edition 2 in the program name, each socket is considered equivalent to 4 vCPUs. For deploying Named User Plus (NUP) licenses on Oracle Ravello, you must always have a sufficient number of NUP licenses to cover your use of the program in the Cloud. This means you must have the greater of: a) the actual number of users, or b) the minimum number of NUP licenses per Processor. For programs with a license minimum of 25 NUP per Processor, you must have a minimum of 25 NUP licenses for every four (4) vCPUs, and for programs with a license minimum of 10 NUP per Processor, you must have a minimum of 10 NUP licenses for every four (4) vCPUs.

When licensing Oracle programs with Standard Edition One, Standard Edition 2 or Standard Edition in the product name (with the exception of WebCenter Enterprise Capture Standard Edition, Java SE Support, Java SE Advanced, and Java SE Suite), where a processor license is counted equivalent to an occupied socket, every one (1) Processor license covers the use of the program on four (4) OCPUs. Regarding NUP minimums for Standard Edition 2, which has license minimum of 10 NUP per Server, you must have the greater of: a) the actual number of users of the program or b) a minimum of 10 NUP licenses for every eight (8) OCPUs. If the instance is less than eight (8) OCPUs, the minimum is still 10 NUP.

Statement of Change:

On 09/24/2009, changed the Core Processor Licensing Factor for Sun UltraSPARC T2+ from 0.75 to 0.50
On 02/16/2010, added new Intel Itanium chip 93XX to 0.5 core factor category. Also added IBM POWER7 chip to core factor 1 category
On 04/08/2010, added new Intel Xeon chips (Nehalem EX, Series 75XX and Westmere EP, Series 56XX) and new AMD Opteron chip (Series 61XX) with a core factor of 0.5
On 07/19/2010, added Intel Xeon chip (Nehalem EX, Series 65XX) and AMD Operton chip (Series 41XX) with a core factor of 0.5
On 10/05/2010, added SPARC T3 chip with a core factor of 0.25
On 12/01/2010, changed the Core Processor Licensing Factor for Intel Itanium Series 93XX from 0.5 to 1.0. Also added notes in parenthesis to the affected rows in the table above
On 12/02/2010, added SPARC64 VII+ chip with a core factor of 0.5
On 06/03/2011, added Intel Xeon Series E7-28XX, Series E7-48XX, and Series E7-88XX chips with a core factor of 0.5
On 09/06/2011, added SPARC T4 chip with a core factor of 0.5
On 12/08/2011, added AMD Opteron Chip Models: 32XX, 42XX, and 62XX with a core factor of 0.5
On 04/16/2012, added Intel Xeon Series E5-26XX, Series E5-16XX, and Series E3-12XX chips with a core factor of 0.5
On 07/19/2012, added Intel Xeon Series E5-24XX, and Series E5-46XX chips with a core factor of 0.5
On 11/07/2012, added IBM Power7+ chip with a core factor of 1.0
On 12/14/2012, added Intel Itanium chip 95XX to 1.0 core factor category
On 01/16/2013, added SPARC64 X chip with a core factor of 0.5
On 01/16/2013, added AMD Opteron Chip Models: 43XX, and 63XX with a core factor of 0.5
On 03/26/2013, added SPARC T5 and SPARC M5 Chip Models with a core factor of 0.5
On 09/25/2013, added SPARC M6 Chip Models with a core factor of 0.5
On 04/08/2014, added SPARC64 X+ chip with a core factor of 0.5
On 04/08/2014, added Intel Xeon Series E7-88XX v2, E7-48XX v2, E7-28XX v2, E5-46XX v2, and E5-26XX v2 chips with a core factor of 0.5
On 06/02/2014, added IBM Power8 chip with a core factor of 1.0
On 11/05/2014, added Intel Xeon Series E5-26XX v3, E5-24XX v2, E5-16XX v3 and E5-16XX v2 chips with a core factor of 0.5
On 04/30/2015, added the "Important Notes" section below
On 06/04/2015, added Intel Xeon Series E7-88XX v3 and E7-48XX v3 chips with a core factor of 0.5
On 10/14/2015, added Intel Xeon Series E5-24XX v3, E5-46XX v3, E3-15XX v5, E3-12XX v2, E3-12XX v3, E3-12XX v4, E5-14XX v3, and E5-14XX v2 chips with a core factor of 0.5
On 10/27/2015, added SPARC M7 Chip Model with a core factor of 0.5
On 05/02/2016, added Intel Xeon Series E5–26XX v4 and E3–12XX v5 chips with a core factor of 0.5
On 07/05/2016, added SPARC S7 Chip Model with a core factor of 0.5
On 08/01/2016, added Intel Xeon Series E7-48XX v4, E7-88XX v4, E5-46XX v4, and E5-16XX v4 chips with a core factor of 0.5
On 10/03/2016, revised the Important Notes section to include reference for Ravello and added socket to OCPU mapping for programs with Standard Edition One, Standard Edition 2 or Standard Edition in the product name
On 10/18/2016, revised the socket to OCPU mapping for programs with Standard Edition One, Standard Edition 2 or Standard Edition in the product name, from 1 socket = 2 OCPUs to 1 Socket = 4 OCPUs
On 04/13/2017, added SPARC64 XII chip model with a core factor of 0.5. Also, added mapping for vCPU to Socket for deployment in Ravello of programs with Standard Edition One, Standard Edition 2 or Standard Edition in the product name
On 08/28/2017, added Intel® Xeon® Platinum 81XX, Intel Xeon Gold 61XX, Intel Xeon Gold 51XX, Intel Xeon Silver 41XX, Intel Xeon Bronze 31XX chips with a core factor of 0.5
On 09/18/2017, added SPARC M8 Chip Model with a core factor of 0.5
On 02/07/2018, added AMD Chip Model EPYC™ 7XX1 with a core factor of 0.5. Also, added the Oracle Database Standard Edition 2 NUP minimums language for deployment of Oracle Cloud
On 09/04/2018, updated IBM Chip Models for Z series (added: z14, z13, z(EC)12, z196, and z11) with a core factor of 1. Also, added IBM's Power9 chip with a core factor of 1. Added Intel chips - E3-12XX V6 & E3-15XX V6 - with a core factor of 0.5
On 07/29/2019, added Intel Chip Models: Intel® Xeon® Platinum 92XX, Intel® Xeon Platinum 82XX, Intel Xeon Gold 62XX, Intel Xeon Gold 52XX, Intel Xeon Silver 42XX, Intel Xeon Bronze 32XX - with a core factor of 0.5
On 10/22/2019, added AMD Chip Model: 7XX2, with a core factor of 0.5
On 06/23/2021, added AMD Chip Model: 7XX3, with a core factor of 0.5. Also, added Intel Xeon® Platinum 83XXH/HL, Intel Xeon Gold 63XXH/HL, Intel Xeon Gold 53XXH chips with a core factor of 0.5
On 10/25/2021 added IBM Chip Model for Z Series (added z15) with a core factor of 1.0. Also added Intel Chip Models: Intel® Xeon® Platinum 83XX/M/P/Q/S/V/Y, Intel Xeon Gold 63XX/T/Y/N, Intel Xeon Gold 53XX/S/T/Y/N, Intel Xeon Silver 43XX/T/Y with a core factor of 0.5
On 08/15/2022, added IBM Chip Model for Z Series (added z16) with a core factor of 1.0. Also added IBM Chip Model for Power Series (added POWER10) with a core factor of 1.0. Added Intel® Xeon® E-21XX, E-21XXG, E-22XX, E-22XXG, E-23XX, E-23XXG with a core factor of 0.5
On 06/30/2023, added Ampere: Altra/AltraMax and AmpereOne with core factor of 0.25 and All other ARM at 1.0 core factor. Also added verberiage for running licenses in Oracle Compute Cloud@Customer.
On 08/11/2023, added clarification in the Section "Running Oracle Licenes in the Oracle Cloud and Oracle Compute Cloud@Customer" persuant to the addition of the Ampere: Altra/AltraMax and AmpereOne with core factor of 0.25 and All other ARM at 1.0 core factor.
On 09/05/2023, added Intel Xeon® Platinum 84XX/+/H/N/P/Q/V/Y/Y+, HPC MAX 94XX, Gold 64XX/+/H/M/N/Q/S/U/Y/Y+, Gold 54XX/+/N/S/U/Y, Silver 44XX/T/Y/+, Bronze 34XXU with a core factor of 0.5. Also, added AMD EPYC 9XX4 with core factor of 0.5.
On 06/12/2024, added Intel® Xeon® Platinum 85XX/H/N/P/Q/U/V/Y/+, Intel Xeon Gold 65XX/S/N/Q/Y/+, Intel Xeon Gold 55XX/U/+, Intel Xeon Silver 45XX/T/Y/+, Intel Xeon Bronze 35XXU with a core factor of 0.5
On 04/01/2025, added Intel® Xeon® 69xxP, 67xxE, 67xxP, 65xxP, and E-24xx with a core factor of 0.5.
On 05/19/2025, added 5th generation AMD EPYC 9xx5, 9xx5F, 9xx5P, expanded 4th generation AMD EPYC to include 9xx4F, 9xx4P, and expanded 3rd generation AMD EPYC to include 7xx3P, all with a core factor of 0.5.
On 01/28/2026, added Intel® Xeon® 69xxP, 67xxE, 67xxP, 65xxP, 63xxP, 69xxP-B, 67xxP-B, 65xxP-B, 63xxP-B, X55xx, E54xx/X54xx, X34xx, 51xx all with a core factor of 0.5. Also, updated/clarified AMD entries (EPYC and Opteron).