

## Vysvětlení porovnání procesorů

Bodové hodnocení procesorů v zadání pro výběrové řízení určuje pouze pořadí výkonnosti jednotlivých typů procesorů s ohledem na zapojení a dostupnosti měření procesorů. V tomto zadání jsou použity následující srovnávací tabulky:

- PassMark single CPU systems - test PassMark pro jeden CPU v sestavě,
- PassMark multi CPU systems - test PassMark pro dva a více procesorů.

Tabulky byly převzaty z internetové databáze <http://www.cpubenchmark.net/> ke dni 1.7.2021. Jedná se o živou databázi a hodnoty se v nich mohou měnit v čase podle toho jak přibývají od uživatelů měření. V čase mezi podáním nabídky a jejím zhodnocením může dojít k poklesu výkonnosti, a tudíž nesplnění zadání, přitom v době odeslání nabídky mohla sestava zadání splňovat. Abychom zabránili této potencionální diskriminaci dodavatelů, přikládáme k zadání také opis z výše uvedených stránek, který se tímto stává neměnným. Akceptujeme taktéž sestavu, u které dodá dodavatel nebo výrobce vlastní měření jako důkaz, že splňuje zadání. To může nastat v případě, že nabídne procesory, které ještě nejsou v databázi zveřejněny.

Tato příloha slouží jako uchování hodnocení výkonu jednotlivých procesorů na trhu dle veřejně dostupné databáze. Je určena pro orientaci dodavatelů, který processor výkonnostně vyhovuje či nevyhovuje zadání a pro zvýšení transparentnosti soutěže.

Hodnocení procesorů ke dni 1.7.2021

### PassMark single cpu systems

| Procesor       | Bodové hodnocení |
|----------------|------------------|
| AMD EPYC 7763  | 87767            |
| AMD EPYC 7713  | 85792            |
| AMD EPYC 7J13  | 84964            |
| AMD EPYC 7643  | 77101            |
| AMD EPYC 7702  | 71686            |
| AMD EPYC 7662  | 71576            |
| AMD EPYC 7742  | 64071            |
| AMD EPYC 7443P | 59870            |
| AMD EPYC 7513  | 59309            |
| AMD EPYC 7R32  | 58556            |
| AMD EPYC 7702P | 57321            |
| AMD EPYC 7542  | 56809            |
| AMD EPYC 7502  | 53591            |
| AMD EPYC 7413  | 47603            |
| AMD EPYC 7502P | 46180            |
| AMD EPYC 7343  | 45882            |

| PassMark single cpu systems          |       |
|--------------------------------------|-------|
| AMD EPYC 7402                        | 45684 |
| AMD EPYC 7313P                       | 42800 |
| AMD EPYC 7452                        | 42149 |
| Intel Xeon W-3275M @ 2.50GHz         | 40825 |
| AMD EPYC 7402P                       | 40754 |
| AMD EPYC 7F52                        | 40468 |
| Intel Xeon Gold 6248R @ 3.00GHz      | 38521 |
| Intel Xeon Platinum 8280 @ 2.70GHz   | 37575 |
| Intel Xeon Gold 6242R @ 3.10GHz      | 35955 |
| Intel Xeon Platinum 8260M @ 2.30GHz  | 33970 |
| Intel Xeon Platinum 8168 @ 2.70GHz   | 33503 |
| AMD EPYC 73F3                        | 33124 |
| AMD EPYC 7302P                       | 32480 |
| Intel Xeon Gold 6252 @ 2.10GHz       | 32410 |
| Intel Xeon Gold 6230R @ 2.10GHz      | 32113 |
| AMD EPYC 7302                        | 31736 |
| Intel Xeon W-2295 @ 3.00GHz          | 31594 |
| AMD EPYC 7282                        | 31510 |
| Intel Xeon Platinum 8259CL @ 2.50GHz | 31500 |
| Intel Xeon Gold 6248 @ 2.50GHz       | 31285 |
| AMD EPYC 7401P                       | 30643 |
| Intel Xeon Gold 5317 @ 3.00GHz       | 30555 |
| Intel Xeon W-3245 @ 3.20GHz          | 30246 |
| Intel Xeon Gold 6246R @ 3.40GHz      | 30145 |
| Intel Xeon W-3265 @ 2.70GHz          | 30105 |
| Intel Xeon Platinum 8268 @ 2.90GHz   | 30103 |
| Intel Xeon Gold 6254 @ 3.10GHz       | 29356 |
| Intel Xeon W-2191B @ 2.30GHz         | 28656 |
| AMD EPYC 7371                        | 28356 |
| Intel Xeon Gold 6238 @ 2.10GHz       | 27617 |
| Intel Xeon Gold 6212U @ 2.40GHz      | 27470 |
| AMD EPYC 7571                        | 27445 |
| Intel Xeon Platinum 8173M @ 2.00GHz  | 27377 |
| Intel Xeon W-2195 @ 2.30GHz          | 27325 |
| Intel Xeon Gold 6210U @ 2.50GHz      | 27131 |
| Intel Xeon Gold 6208U @ 2.90GHz      | 26901 |
| Intel Xeon Platinum 8175M @ 2.50GHz  | 26659 |
| Intel Xeon Platinum 8160 @ 2.10GHz   | 26485 |
| AMD EPYC 7272                        | 26446 |
| Intel Xeon Gold 6154 @ 3.00GHz       | 26298 |
| Intel Xeon Gold 6242 @ 2.80GHz       | 26288 |
| Intel Xeon W-2265 @ 3.50GHz          | 26048 |
| AMD EPYC 7551P                       | 25933 |

|                                     |       |
|-------------------------------------|-------|
| <b>PassMark single cpu systems</b>  |       |
| Intel Xeon Gold 5220 @ 2.20GHz      | 25740 |
| Intel Xeon Gold 6226R @ 2.90GHz     | 25570 |
| Intel Xeon Platinum 8124M @ 3.00GHz | 25456 |
| Intel Xeon Platinum 8167M @ 2.00GHz | 25396 |
| Intel Xeon W-3235 @ 3.30GHz         | 25371 |
| Intel Xeon Gold 6230 @ 2.10GHz      | 25326 |
| Intel Xeon W-1370P @ 3.60GHz        | 25324 |
| Intel Xeon Silver 4310 @ 2.10GHz    | 25218 |
| Intel Xeon W-11955M @ 2.60GHz       | 25119 |
| AMD EPYC 7501                       | 24925 |
| Intel Xeon Gold 6138T @ 2.00GHz     | 24800 |
| Intel Xeon Gold 6143 @ 2.80GHz      | 24786 |
| Intel Xeon Gold 6246 @ 3.30GHz      | 24446 |
| Intel Xeon E5-2699 v4 @ 2.20GHz     | 24272 |
| Intel Xeon Gold 6148 @ 2.40GHz      | 24133 |
| Intel Xeon Gold 6138 @ 2.00GHz      | 24115 |
| Intel Xeon E5-2679 v4 @ 2.50GHz     | 23639 |
| Intel Xeon W-1290P @ 3.70GHz        | 23594 |
| AMD EPYC 7351                       | 23566 |
| Intel Xeon Gold 6146 @ 3.20GHz      | 23432 |
| Intel Xeon W-2170B @ 2.50GHz        | 23300 |
| Intel Xeon Platinum 8176 @ 2.10GHz  | 23179 |
| Intel Xeon W-2175 @ 2.50GHz         | 22912 |
| Intel Xeon Gold 6140 @ 2.30GHz      | 22733 |
| Intel Xeon W-2255 @ 3.70GHz         | 22680 |
| AMD EPYC 7F32                       | 22303 |
| Intel Xeon Gold 6152 @ 2.10GHz      | 22291 |
| Intel Xeon Gold 5218R @ 2.10GHz     | 22243 |
| Intel Xeon W-1290E @ 3.50GHz        | 22138 |
| Intel Xeon Gold 5218 @ 2.30GHz      | 22117 |
| Intel Xeon E5-2698 v4 @ 2.20GHz     | 22091 |
| Intel Xeon E5-2696 v4 @ 2.20GHz     | 21965 |
| Intel Xeon Gold 6136 @ 3.00GHz      | 21835 |
| AMD EPYC 7551                       | 21806 |
| Intel Xeon Gold 6130T @ 2.10GHz     | 21803 |
| Intel Xeon W-1290 @ 3.20GHz         | 21674 |
| Intel Xeon E5-2696 v3 @ 2.30GHz     | 21418 |
| AMD EPYC 7281                       | 21230 |
| Intel Xeon W-2155 @ 3.30GHz         | 21137 |
| AMD EPYC 7262                       | 20952 |
| Intel Xeon E5-2697R v4 @ 2.30GHz    | 20843 |
| Intel Xeon E5-2690 v4 @ 2.60GHz     | 20779 |
| Intel Xeon E5-2697 v4 @ 2.30GHz     | 20556 |

| PassMark single cpu systems       |       |
|-----------------------------------|-------|
| AMD EPYC 7451                     | 20471 |
| Intel Xeon E5-2695 v4 @ 2.10GHz   | 20096 |
| Intel Xeon W-11855M @ 3.20GHz     | 20088 |
| Intel Xeon W-2150B @ 3.00GHz      | 19977 |
| AMD EPYC 7252                     | 19965 |
| Intel Xeon Gold 6226 @ 2.70GHz    | 19810 |
| Intel Xeon E5-2699 v3 @ 2.30GHz   | 19763 |
| AMD EPYC 7351P                    | 19589 |
| Intel Xeon E5-2698 v3 @ 2.30GHz   | 19552 |
| Intel Xeon Gold 6132 @ 2.60GHz    | 19552 |
| Intel Xeon W-2245 @ 3.90GHz       | 19457 |
| Intel Xeon E5-2682 v4 @ 2.50GHz   | 19372 |
| Intel Xeon Gold 6137 @ 3.90GHz    | 19365 |
| Intel Xeon W-1270P @ 3.80GHz      | 19347 |
| Intel Xeon Gold 6126 @ 2.60GHz    | 19223 |
| Intel Xeon W-1350 @ 3.30GHz       | 19154 |
| Intel Xeon E5-2697A v4 @ 2.60GHz  | 18996 |
| Intel Xeon E5-2676 v4 @ 2.40GHz   | 18978 |
| Intel Xeon Silver 4214R @ 2.40GHz | 18935 |
| Intel Xeon E5-2697 v3 @ 2.60GHz   | 18870 |
| Intel Xeon Gold 6144 @ 3.50GHz    | 18656 |
| Intel Xeon Gold 6130 @ 2.10GHz    | 18634 |
| Intel Xeon Silver 4216 @ 2.10GHz  | 18561 |
| Intel Xeon W-1290T @ 1.90GHz      | 18409 |
| Intel Xeon D-2183IT @ 2.20GHz     | 18385 |
| Intel Xeon E5-2680 v4 @ 2.40GHz   | 18373 |
| Intel Xeon E5-2683 v4 @ 2.10GHz   | 18254 |
| Intel Xeon W-2145 @ 3.70GHz       | 18165 |
| Intel Xeon D-2187NT @ 2.00GHz     | 18070 |
| Intel Xeon W-1270 @ 3.40GHz       | 17830 |
| Intel Xeon E5-2680R v4 @ 2.40GHz  | 17795 |
| Intel Xeon E5-2687W v4 @ 3.00GHz  | 17791 |
| Intel Xeon E5-2686 v3 @ 2.00GHz   | 17678 |
| Intel Xeon E-2278G @ 3.40GHz      | 17609 |
| Intel Xeon Gold 5120T @ 2.20GHz   | 17540 |
| Intel Xeon E5-2673 v4 @ 2.30GHz   | 17533 |
| Intel Xeon E-2278GE @ 3.30GHz     | 17210 |
| Intel Xeon E5-4669 v3 @ 2.10GHz   | 17209 |
| Intel Xeon E-2288G @ 3.70GHz      | 17083 |
| Intel Xeon Gold 5120 @ 2.20GHz    | 16990 |
| Intel Xeon W-3223 @ 3.50GHz       | 16979 |
| Intel Xeon W-10885M @ 2.40GHz     | 16895 |
| Intel Xeon W-2140B @ 3.20GHz      | 16827 |

|                                    |       |
|------------------------------------|-------|
| <b>PassMark single cpu systems</b> |       |
| Intel Xeon E5-2686 v4 @ 2.30GHz    | 16745 |
| Intel Xeon E5-2689 v4 @ 3.10GHz    | 16706 |
| AMD EPYC 7232P                     | 16658 |
| Intel Xeon Gold 6134 @ 3.20GHz     | 16513 |
| Intel Xeon E5-2690 v3 @ 2.60GHz    | 16330 |
| Intel Xeon Silver 4214 @ 2.20GHz   | 16140 |
| Intel Xeon E5-2669 v3 @ 2.30GHz    | 16107 |
| Intel Xeon Gold 5215 @ 2.50GHz     | 16058 |
| Intel Xeon E5-2695 v3 @ 2.30GHz    | 16032 |
| Intel Xeon Gold 5118 @ 2.30GHz     | 16015 |
| Intel Xeon Gold 5117 @ 2.00GHz     | 15816 |
| Intel Xeon E5-2680 v3 @ 2.50GHz    | 15439 |
| Intel Xeon E5-4667 v3 @ 2.00GHz    | 15397 |
| Intel Xeon Silver 4214Y @ 2.20GHz  | 15248 |
| Intel Xeon Silver 4116T @ 2.10GHz  | 15187 |
| Intel Xeon D-2166NT @ 2.00GHz      | 15105 |
| AMD EPYC 7301                      | 14991 |
| Intel Xeon E5-2699A v4 @ 2.40GHz   | 14917 |
| AMD EPYC 7251                      | 14865 |
| Intel Xeon Silver 4210R @ 2.40GHz  | 14852 |
| Intel Xeon E5-2678 v3 @ 2.50GHz    | 14825 |
| Intel Xeon E5-1681 v3 @ 2.90GHz    | 14820 |
| Intel Xeon Silver 4116 @ 2.10GHz   | 14785 |
| Intel Xeon E5-2687W v3 @ 3.10GHz   | 14779 |
| Intel Xeon E5-2683 v3 @ 2.00GHz    | 14734 |
| Intel Xeon W-1250P @ 4.10GHz       | 14632 |
| Intel Xeon E5-1680 v4 @ 3.40GHz    | 14451 |
| Intel Xeon Silver 4215 @ 2.50GHz   | 14439 |
| Intel Xeon E-2236 @ 3.40GHz        | 14412 |
| Intel Xeon W-2235 @ 3.80GHz        | 14410 |
| Intel Xeon E5-2676 v3 @ 2.40GHz    | 14407 |
| Intel Xeon Silver 4123 @ 3.00GHz   | 14405 |
| Intel Xeon E-2286G @ 4.00GHz       | 14396 |
| Intel Xeon E5-2660 v4 @ 2.00GHz    | 14342 |
| Intel Xeon E5-2697 v2 @ 2.70GHz    | 14276 |
| Intel Xeon Gold 6128 @ 3.40GHz     | 14273 |
| Intel Xeon Silver 4210 @ 2.20GHz   | 14263 |
| Intel Xeon E5-4660 v3 @ 2.10GHz    | 14256 |
| Intel Xeon E5-2696 v2 @ 2.50GHz    | 14229 |
| Intel Xeon E5-2658 v4 @ 2.30GHz    | 14168 |
| Intel Xeon E5-2667 v4 @ 3.20GHz    | 14148 |
| Intel Xeon W-2135 @ 3.70GHz        | 14114 |
| AMD EPYC 3251                      | 14072 |

| PassMark single cpu systems      |       |
|----------------------------------|-------|
| Intel Xeon E5-2673 v3 @ 2.40GHz  | 14055 |
| Intel Xeon E5-2670 v3 @ 2.30GHz  | 14020 |
| Intel Xeon W-1250 @ 3.30GHz      | 14001 |
| Intel Xeon E-2186G @ 3.80GHz     | 13976 |
| Intel Xeon E-2246G @ 3.60GHz     | 13957 |
| Intel Xeon E-2176G @ 3.70GHz     | 13698 |
| Intel Xeon E-2136 @ 3.30GHz      | 13506 |
| Intel Xeon E5-2658 v3 @ 2.20GHz  | 13487 |
| Intel Xeon E5-2690 v2 @ 3.00GHz  | 13431 |
| Intel Xeon E5-1660 v4 @ 3.20GHz  | 13395 |
| Intel Xeon E5-2695 v2 @ 2.40GHz  | 13382 |
| Intel Xeon E-2276G @ 3.80GHz     | 13375 |
| Intel Xeon E-2146G @ 3.50GHz     | 13326 |
| Intel Xeon W-10855M @ 2.80GHz    | 13136 |
| Intel Xeon D-2143IT @ 2.20GHz    | 13107 |
| Intel Xeon E5-1680 v3 @ 3.20GHz  | 13081 |
| Intel Xeon E5-2660 v3 @ 2.60GHz  | 13013 |
| Intel Xeon E5-4627 v4 @ 2.60GHz  | 12969 |
| Intel Xeon E5-2685 v3 @ 2.60GHz  | 12944 |
| Intel Xeon E5-2667 v3 @ 3.20GHz  | 12739 |
| AMD EPYC 3201                    | 12677 |
| Intel Xeon Silver 4114 @ 2.20GHz | 12581 |
| Intel Xeon E5-2680 v2 @ 2.80GHz  | 12567 |
| Intel Xeon E5-4657L v2 @ 2.40GHz | 12495 |
| Intel Xeon E5-1680 v2 @ 3.00GHz  | 12403 |
| Intel Xeon W-2133 @ 3.60GHz      | 12351 |
| Intel Xeon E5-2687W v2 @ 3.40GHz | 12240 |
| Intel Xeon E5-2650 v4 @ 2.20GHz  | 12225 |
| Intel Xeon E5-2667 v2 @ 3.30GHz  | 12188 |
| Intel Xeon D-2141I @ 2.20GHz     | 12177 |
| Intel Xeon E5-2692 v2 @ 2.20GHz  | 12119 |
| Intel Xeon E5-2618L v4 @ 2.20GHz | 12041 |
| Intel Xeon E-2278GEL @ 2.00GHz   | 12024 |
| Intel Xeon E5-2675 v3 @ 1.80GHz  | 11960 |
| Intel Xeon E5-2673 v2 @ 3.30GHz  | 11919 |
| Intel Xeon E5-2650L v4 @ 1.70GHz | 11918 |
| Intel Xeon E5-2650 v3 @ 2.30GHz  | 11907 |
| Intel Xeon E5-2649 v3 @ 2.30GHz  | 11796 |
| Intel Xeon E5-2663 v3 @ 2.80GHz  | 11777 |
| Intel Xeon E5-2650L v3 @ 1.80GHz | 11711 |
| Intel Xeon E5-2630 v4 @ 2.20GHz  | 11691 |
| Intel Xeon D-1577 @ 1.30GHz      | 11645 |
| Intel Xeon E5-1660 v3 @ 3.00GHz  | 11617 |

| <b>PassMark single cpu systems</b> |       |
|------------------------------------|-------|
| Intel Xeon E5-2648L v4 @ 1.80GHz   | 11547 |
| Intel Xeon E5-4669 v4 @ 2.20GHz    | 11523 |
| Intel Xeon E5-2640 v4 @ 2.40GHz    | 11482 |
| Intel Xeon E5-2670 v2 @ 2.50GHz    | 11459 |
| Intel Xeon D-2146NT @ 2.30GHz      | 11438 |
| Intel Xeon E5-4627 v3 @ 2.60GHz    | 11344 |
| Intel Xeon E5-2640 v3 @ 2.60GHz    | 11263 |
| Intel Xeon E5-1650 v4 @ 3.60GHz    | 11252 |
| Intel Xeon W-2225 @ 4.10GHz        | 11226 |
| Intel Xeon Silver 4208 @ 2.10GHz   | 11163 |
| Intel Xeon E5-2643 v4 @ 3.40GHz    | 11152 |
| Intel Xeon E-2226G @ 3.40GHz       | 11145 |
| Intel Xeon E5-2628L v4 @ 1.90GHz   | 11079 |
| Intel Xeon E-2126G @ 3.30GHz       | 10922 |
| Intel Xeon E5-2470 v2 @ 2.40GHz    | 10871 |
| Intel Xeon E5-2630L v4 @ 1.80GHz   | 10864 |
| Intel Xeon E5-4650 v3 @ 2.10GHz    | 10838 |
| Intel Xeon E5-4620 v3 @ 2.00GHz    | 10681 |
| Intel Core i5-1140G7 @ 1.10GHz     | 10560 |

### PassMark multi CPU systems

| <b>Procesor</b>                               | <b>Bodové hodnocení</b> |
|---|-------------------------|
| [Dual CPU] AMD EPYC 75F3                      | 110748                  |
| [Dual CPU] AMD EPYC 7543                      | 103492                  |
| [Dual CPU] AMD EPYC 7742                      | 99760                   |
| [Dual CPU] AMD EPYC 7662                      | 95818                   |
| [Dual CPU] AMD EPYC 7713                      | 95337                   |
| [Dual CPU] Intel Xeon Platinum 8368 @ 2.40GHz | 92054                   |
| [Dual CPU] AMD EPYC 7702                      | 91878                   |
| [Dual CPU] AMD EPYC 7552                      | 91019                   |
| [Dual CPU] AMD EPYC 7542                      | 70935                   |
| [Dual CPU] AMD EPYC 7F52                      | 65176                   |
| [Dual CPU] Intel Xeon Platinum 8280 @ 2.70GHz | 64291                   |
| [Dual CPU] Intel Xeon Gold 6258R @ 2.70GHz    | 63446                   |
| [Dual CPU] Intel Xeon Gold 6248R @ 3.00GHz    | 62712                   |
| [Dual CPU] Intel Xeon Gold 6238R @ 2.20GHz    | 59678                   |
| [Dual CPU] Intel Xeon Gold 6230R @ 2.10GHz    | 59310                   |
| [Dual CPU] AMD EPYC 7601                      | 58733                   |

| PassMark multi CPU systems                      |       |
|---|-------|
| [Dual CPU] AMD EPYC 7402                        | 58097 |
| [Dual CPU] Intel Xeon Platinum 8171M @ 2.60GHz  | 57780 |
| [Dual CPU] Intel Xeon Gold 5220R @ 2.20GHz      | 56465 |
| [Dual CPU] Intel Xeon Platinum 8260M @ 2.30GHz  | 55297 |
| [Dual CPU] Intel Xeon Gold 6254 @ 3.10GHz       | 54869 |
| [Dual CPU] Intel Xeon Gold 6240R @ 2.40GHz      | 54024 |
| [Dual CPU] Intel Xeon Platinum 8160M @ 2.10GHz  | 53158 |
| [Dual CPU] Intel Xeon Platinum 8173M @ 2.00GHz  | 53093 |
| [Dual CPU] AMD EPYC 7551                        | 51580 |
| [Dual CPU] Intel Xeon Platinum 8260 @ 2.40GHz   | 51387 |
| [Dual CPU] Intel Xeon Gold 6154 @ 3.00GHz       | 51087 |
| [Dual CPU] Intel Xeon Gold 6148 @ 2.40GHz       | 49473 |
| [Dual CPU] Intel Xeon Gold 6152 @ 2.10GHz       | 49437 |
| [Dual CPU] Intel Xeon Gold 6240 @ 2.60GHz       | 49304 |
| [Dual CPU] Intel Xeon Platinum 8168 @ 2.70GHz   | 49021 |
| [Quad CPU] Intel Xeon E7-8880 v3 @ 2.30GHz      | 49004 |
| [Dual CPU] Intel Xeon Platinum 8124M @ 3.00GHz  | 48494 |
| [Quad CPU] Intel Xeon E7-4880 v2 @ 2.50GHz      | 48435 |
| [Dual CPU] Intel Xeon Platinum 8252C @ 3.80GHz  | 47757 |
| [Dual CPU] Intel Xeon E5-2699A v4 @ 2.40GHz     | 47699 |
| [Dual CPU] Intel Xeon Gold 6256 @ 3.60GHz       | 46454 |
| [Dual CPU] Intel Xeon Gold 6138 @ 2.00GHz       | 44406 |
| [Dual CPU] AMD EPYC 7272                        | 44270 |
| [Dual CPU] Intel Xeon Gold 6226R @ 2.90GHz      | 44135 |
| [Dual CPU] Intel Xeon Platinum 8273CL @ 2.20GHz | 43793 |
| [Dual CPU] Intel Xeon E5-2699 v4 @ 2.20GHz      | 42443 |
| [Dual CPU] AMD EPYC 7302                        | 41834 |
| [Dual CPU] Intel Xeon Gold 6230 @ 2.10GHz       | 40882 |
| [Dual CPU] Intel Xeon Silver 4310 @ 2.10GHz     | 40478 |
| [Dual CPU] Intel Xeon E5-2697 v4 @ 2.30GHz      | 39434 |



| PassMark multi CPU systems                    |       |
|---|-------|
| [Dual CPU] Intel Xeon E5-2697A v4 @ 2.60GHz   | 37023 |
| [Quad CPU] Intel Xeon E7-8867 v3 @ 2.50GHz    | 36908 |
| [Dual CPU] Intel Xeon Gold 6130 @ 2.10GHz     | 36567 |
| [Quad CPU] Intel Xeon E7-8857 v2 @ 3.00GHz    | 36304 |
| [Dual CPU] Intel Xeon Gold 6149 @ 3.10GHz     | 35680 |
| [Dual CPU] Intel Xeon Gold 5218 @ 2.30GHz     | 35454 |
| [Dual CPU] Intel Xeon Gold 6130H @ 2.10GHz    | 35440 |
| [Dual CPU] Intel Xeon E5-2699 v3 @ 2.30GHz    | 34572 |
| [Dual CPU] Intel Xeon E5-2695 v4 @ 2.10GHz    | 34303 |
| [Dual CPU] AMD EPYC 7262                      | 34227 |
| [Dual CPU] Intel Xeon E5-2690 v4 @ 2.60GHz    | 34196 |
| [Dual CPU] Intel Xeon Gold 5220 @ 2.20GHz     | 33947 |
| [Dual CPU] Intel Xeon Gold 6136 @ 3.00GHz     | 33555 |
| [Dual CPU] Intel Xeon E5-2696 v3 @ 2.30GHz    | 33527 |
| [Dual CPU] Intel Xeon E5-2673 v4 @ 2.30GHz    | 33029 |
| [Dual CPU] Intel Xeon Gold 6142 @ 2.60GHz     | 32948 |
| [Quad CPU] Intel Xeon E5-4650 v2 @ 2.40GHz    | 32805 |
| [Dual CPU] Intel Xeon Gold 6244 @ 3.60GHz     | 32232 |
| [Dual CPU] Intel Xeon Platinum 8153 @ 2.00GHz | 32180 |
| [Dual CPU] Intel Xeon E5-2698 v3 @ 2.30GHz    | 30641 |
| [Dual CPU] Intel Xeon Gold 6226 @ 2.70GHz     | 30206 |
| [Dual CPU] Intel Xeon Gold 6234 @ 3.30GHz     | 30063 |
| [Dual CPU] Intel Xeon E5-2687W v4 @ 3.00GHz   | 30016 |
| [Dual CPU] Intel Xeon Silver 4216 @ 2.10GHz   | 29792 |
| [Dual CPU] Intel Xeon E5-4669 v3 @ 2.10GHz    | 29759 |
| [Dual CPU] Intel Xeon E5-2680 v4 @ 2.40GHz    | 29408 |
| [Dual CPU] Intel Xeon Silver 4214R @ 2.40GHz  | 29077 |
| [Dual CPU] Intel Xeon E5-2697 v3 @ 2.60GHz    | 28954 |
| [Dual CPU] Intel Xeon E5-2695 v3 @ 2.30GHz    | 28874 |
| [Dual CPU] Intel Xeon Gold 5120 @ 2.20GHz     | 28331 |
| [Dual CPU] Intel Xeon Gold 6134 @ 3.20GHz     | 28312 |
| [Dual CPU] Intel Xeon Gold 6144 @ 3.50GHz     | 27972 |
| [Dual CPU] Intel Xeon E5-2658 v4 @ 2.30GHz    | 27797 |
| [Dual CPU] Intel Xeon Gold 5215 @ 2.50GHz     | 27736 |
| [Dual CPU] Intel Xeon E5-2690 v3 @ 2.60GHz    | 26891 |

| PassMark multi CPU systems                    |       |
|---|-------|
| [Dual CPU] Intel Xeon Gold 6242 @ 2.80GHz     | 26490 |
| [Dual CPU] Intel Xeon Silver 4214 @ 2.20GHz   | 25993 |
| [Dual CPU] Intel Xeon E7-8880 v2 @ 2.50GHz    | 25966 |
| [Dual CPU] Intel Xeon Silver 4116 @ 2.10GHz   | 25641 |
| [Dual CPU] AMD EPYC 7351                      | 25430 |
| [Dual CPU] Intel Xeon E5-2680 v3 @ 2.50GHz    | 25273 |
| [Dual CPU] Intel Xeon E5-2678 v3 @ 2.50GHz    | 25219 |
| [Dual CPU] Intel Xeon Silver 4215R @ 3.20GHz  | 24930 |
| [Dual CPU] Intel Xeon E5-2650 v4 @ 2.20GHz    | 24465 |
| [Quad CPU] Intel Xeon E7- 8870 @ 2.40GHz      | 24434 |
| [Dual CPU] Intel Xeon E5-2683 v3 @ 2.00GHz    | 24186 |
| [Dual CPU] Intel Xeon E5-2697 v2 @ 2.70GHz    | 24169 |
| [Dual CPU] Intel Xeon E5-2667 v4 @ 3.20GHz    | 23770 |
| [Dual CPU] Intel Xeon Gold 6128 @ 3.40GHz     | 23601 |
| [Dual CPU] Intel Xeon Platinum 8253 @ 2.20GHz | 23557 |
| [Dual CPU] Intel Xeon E5-2696 v2 @ 2.50GHz    | 23483 |
| [Dual CPU] Intel Xeon Silver 4210 @ 2.20GHz   | 23471 |
| [Dual CPU] Intel Xeon E5-2687W v3 @ 3.10GHz   | 23309 |
| [Dual CPU] Intel Xeon E5-2670 v3 @ 2.30GHz    | 23226 |
| [Dual CPU] Intel Xeon Gold 5118 @ 2.30GHz     | 22945 |
| [Dual CPU] Intel Xeon E5-2673 v3 @ 2.40GHz    | 22858 |
| [Dual CPU] Intel Xeon E5-2658 v3 @ 2.20GHz    | 22573 |
| [Dual CPU] Intel Xeon E5-4640 v4 @ 2.10GHz    | 22559 |
| [Dual CPU] Intel Xeon E5-2695 v2 @ 2.40GHz    | 22440 |
| [Dual CPU] Intel Xeon E5-2690 v2 @ 3.00GHz    | 22376 |
| [Dual CPU] Intel Xeon E5-2660 v3 @ 2.60GHz    | 22235 |
| [Dual CPU] Intel Xeon E5-2667 v3 @ 3.20GHz    | 21642 |
| [Dual CPU] Intel Xeon E5-4657L v2 @ 2.40GHz   | 21548 |
| [Quad CPU] Intel Xeon E7- 4870 @ 2.40GHz      | 21398 |
| [Dual CPU] Intel Xeon E5-2667 v2 @ 3.30GHz    | 21314 |
| [Dual CPU] Intel Xeon E5-2680 v2 @ 2.80GHz    | 21238 |
| [Dual CPU] Intel Xeon Silver 4114 @ 2.20GHz   | 21179 |
| [Dual CPU] Intel Xeon E5-2640 v4 @ 2.40GHz    | 21006 |
| [Dual CPU] Intel Xeon E5-2687W v2 @ 3.40GHz   | 20982 |
| [Dual CPU] Intel Xeon E5-2673 v2 @ 3.30GHz    | 20603 |

| PassMark multi CPU systems                  |       |
|---|-------|
| [Dual CPU] Intel Xeon E5-2670 v2 @ 2.50GHz  | 20486 |
| [Dual CPU] Intel Xeon E5-4627 v3 @ 2.60GHz  | 20294 |
| [Dual CPU] Intel Xeon E5-2643 v4 @ 3.40GHz  | 20004 |
| [Quad CPU] Intel Xeon E5-4640 @ 2.40GHz     | 19664 |
| [Dual CPU] Intel Xeon E5-2470 v2 @ 2.40GHz  | 19275 |
| [Dual CPU] Intel Xeon E5-2630 v4 @ 2.20GHz  | 19251 |
| [Dual CPU] AMD EPYC 7301                    | 18800 |
| [Dual CPU] Intel Xeon E5-2650 v3 @ 2.30GHz  | 18795 |
| [Dual CPU] Intel Xeon E5-2660 v2 @ 2.20GHz  | 18753 |
| [Dual CPU] Intel Xeon Silver 4208 @ 2.10GHz | 18472 |
| [Dual CPU] Intel Xeon E5-2650L v3 @ 1.80GHz | 18466 |
| [Dual CPU] Intel Xeon E5-2643 v3 @ 3.40GHz  | 17902 |
| [Dual CPU] Intel Xeon Gold 5222 @ 3.80GHz   | 17787 |
| [Dual CPU] Intel Xeon E5-2640 v3 @ 2.60GHz  | 17774 |
| [Dual CPU] Intel Xeon E5-2687W @ 3.10GHz    | 17769 |
| [Dual CPU] Intel Xeon E5-2650 v2 @ 2.60GHz  | 17507 |
| [Dual CPU] Intel Xeon E5-4627 v2 @ 3.30GHz  | 17376 |
| [Dual CPU] Intel Xeon E5-2630 v3 @ 2.40GHz  | 17174 |
| [Dual CPU] Intel Xeon Silver 4110 @ 2.10GHz | 17117 |
| [Dual CPU] Intel Xeon E5-2690 @ 2.90GHz     | 17038 |
| [Quad CPU] Intel Xeon E5-4617 @ 2.90GHz     | 16902 |
| [Dual CPU] Intel Xeon E5-2643 v2 @ 3.50GHz  | 16807 |
| [Dual CPU] Intel Xeon E5-2450 v2 @ 2.50GHz  | 16790 |
| [Dual CPU] Intel Xeon Gold 5122 @ 3.60GHz   | 16447 |
| [Dual CPU] Intel Xeon E5-2689 @ 2.60GHz     | 16416 |
| [Dual CPU] Intel Xeon E5-2680 @ 2.70GHz     | 16201 |
| [Dual CPU] Intel Xeon E5-2620 v4 @ 2.10GHz  | 16177 |
| [Dual CPU] Intel Xeon E5-2651 v2 @ 1.80GHz  | 16028 |
| [Dual CPU] Intel Xeon E5-2670 @ 2.60GHz     | 15754 |
| [Quad CPU] Intel Xeon E5-4620 v2 @ 2.60GHz  | 14861 |
| [Dual CPU] Intel Xeon E5-2470 @ 2.30GHz     | 14771 |
| [Dual CPU] Intel Xeon E5-2665 @ 2.40GHz     | 14707 |
| [Dual CPU] Intel Xeon E5-2630L v3 @ 1.80GHz | 14666 |
| [Dual CPU] Intel Xeon E5-4650 @ 2.70GHz     | 14309 |
| [Dual CPU] Intel Xeon E5-2650L v2 @ 1.70GHz | 14154 |
| [Dual CPU] Intel Xeon E5-2660 @ 2.20GHz     | 14017 |

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|--|-------|
| <b>PassMark multi CPU systems</b>            |       |
| [Quad CPU] AMD Opteron 6278                  | 13733 |
| [Dual CPU] Intel Xeon E5-2637 v4 @ 3.50GHz   | 13528 |
| [Dual CPU] Intel Xeon E5-2630 v2 @ 2.60GHz   | 13487 |
| [Dual CPU] Intel Xeon E5-2620 v3 @ 2.40GHz   | 13437 |
| [Dual CPU] Intel Xeon E5-2637 v3 @ 3.50GHz   | 13425 |
| [Dual CPU] Intel Xeon E5-2667 @ 2.90GHz      | 13305 |
| [Quad CPU] AMD Opteron 6378                  | 13236 |
| [Dual CPU] AMD Opteron 6386 SE               | 12876 |
| [Dual CPU] Intel Xeon E5-2640 v2 @ 2.00GHz   | 12873 |
| [Dual CPU] Intel Xeon E5-2650 @ 2.00GHz      | 12666 |
| [Dual CPU] Intel Xeon X5690 @ 3.47GHz        | 12573 |
| [Dual CPU] Intel Xeon E5-2637 v2 @ 3.50GHz   | 12290 |
| [Dual CPU] Intel Xeon E5-2430 v2 @ 2.50GHz   | 12144 |
| [Dual CPU] Intel Xeon X5680 @ 3.33GHz        | 12121 |
| [Dual CPU] Intel Xeon E5-2623 v3 @ 3.00GHz   | 12043 |
| [Dual CPU] Intel Xeon Silver 4112 @ 2.60GHz  | 12008 |
| [Dual CPU] Intel Xeon E5-2640 @ 2.50GHz      | 11679 |
| [Dual CPU] Intel Xeon E5-2450L @ 1.80GHz     | 11627 |
| [Dual CPU] Intel Xeon X5675 @ 3.07GHz        | 11520 |
| [Dual CPU] Intel Xeon E5-2420 v2 @ 2.20GHz   | 11504 |
| [Dual CPU] Intel Xeon E5-4617 @ 2.90GHz      | 11387 |
| [Dual CPU] Intel Xeon E5-2630L v2 @ 2.40GHz  | 11301 |
| [Quad CPU] AMD Opteron 6174                  | 11266 |
| [Dual CPU] Intel Xeon E5-2623 v4 @ 2.60GHz   | 10900 |
| [Dual CPU] Intel Xeon E5-2620 v2 @ 2.10GHz   | 10884 |
| [Dual CPU] Intel Xeon E5-2440 @ 2.40GHz      | 10835 |
| [Dual CPU] Intel Xeon Bronze 3206R @ 1.90GHz | 10797 |
| [Dual CPU] Intel Xeon X5670 @ 2.93GHz        | 10786 |
| [Dual CPU] AMD Opteron 6378                  | 10758 |
| [Dual CPU] Intel Xeon E5-2630 @ 2.30GHz      | 10668 |
| [Dual CPU] AMD Opteron 6380                  | 10612 |
| [Dual CPU] Intel Xeon E5-2430L v2 @ 2.40GHz  | 10572 |
| [Dual CPU] Intel Xeon X5650 @ 2.67GHz        | 10472 |
| [Quad CPU] Intel Xeon E7540 @ 2.00GHz        | 10376 |
| [Dual CPU] AMD Opteron 6274                  | 10313 |

| PassMark multi CPU systems                  |       |
|---|-------|
| [Dual CPU] AMD Opteron 6276                 | 10286 |
| [Dual CPU] AMD Opteron 6366 HE              | 10265 |
| [Dual CPU] Intel Xeon X5660 @ 2.80GHz       | 10239 |
| [Dual CPU] AMD Opteron 6376                 | 10210 |
| [Dual CPU] Intel Xeon E5-2609 v4 @ 1.70GHz  | 10198 |
| [Dual CPU] AMD Opteron 6328                 | 9827  |
| [Dual CPU] Intel Xeon E5-2643 @ 3.30GHz     | 9741  |
| [Dual CPU] Intel Xeon E5-2658 @ 2.10GHz     | 9652  |
| [Dual CPU] Intel Xeon E5-2620 @ 2.00GHz     | 9605  |
| [Dual CPU] Intel Xeon E5-2430L @ 2.00GHz    | 9512  |
| [Dual CPU] Intel Xeon X5677 @ 3.47GHz       | 9486  |
| [Dual CPU] Intel Xeon E5649 @ 2.53GHz       | 9439  |
| [Dual CPU] Intel Xeon X5679 @ 3.20GHz       | 9431  |
| [Dual CPU] Intel Xeon E5-2430 @ 2.20GHz     | 9418  |
| [Dual CPU] Intel Xeon E5-2420 @ 1.90GHz     | 9245  |
| [Dual CPU] Intel Xeon X5687 @ 3.60GHz       | 9245  |
| [Dual CPU] Intel Xeon X5672 @ 3.20GHz       | 8746  |
| [Dual CPU] Intel Xeon L5640 @ 2.27GHz       | 8707  |
| [Dual CPU] Intel Xeon E5645 @ 2.40GHz       | 8700  |
| [Dual CPU] AMD Opteron 6234                 | 8644  |
| [Dual CPU] AMD Opteron 4284                 | 8560  |
| [Dual CPU] Intel Xeon E5-2609 v3 @ 1.90GHz  | 8414  |
| [Dual CPU] Intel Xeon X5667 @ 3.07GHz       | 8294  |
| [Dual CPU] Intel Xeon X5647 @ 2.93GHz       | 8135  |
| [Dual CPU] AMD Opteron 6220                 | 7984  |
| [Dual CPU] Intel Xeon Bronze 3104 @ 1.70GHz | 7957  |
| [Dual CPU] AMD Opteron 4386                 | 7934  |
| [Dual CPU] Intel Xeon X7550 @ 2.00GHz       | 7873  |
| [Quad CPU] Intel Xeon X7350 @ 2.93GHz       | 7818  |
| [Dual CPU] Intel Xeon E5640 @ 2.67GHz       | 7292  |
| [Quad CPU] Intel Xeon E7530 @ 1.87GHz       | 7231  |
| [Dual CPU] Intel Xeon L5638 @ 2.00GHz       | 7217  |
| [Dual CPU] AMD Opteron 6282 SE              | 7130  |
| [Dual CPU] Intel Xeon E5-2609 v2 @ 2.50GHz  | 6657  |
| [Dual CPU] Intel Xeon E5630 @ 2.53GHz       | 6582  |
| [Dual CPU] Intel Xeon W5590 @ 3.33GHz       | 6561  |

| PassMark multi CPU systems                 |      |
|--|------|
| [Quad CPU] Intel Xeon E7340 @ 2.40GHz      | 6544 |
| [Quad CPU] Intel Xeon E7330 @ 2.40GHz      | 6491 |
| [Dual CPU] Intel Xeon E5-2603 v3 @ 1.60GHz | 6490 |
| [Dual CPU] Intel Xeon E5620 @ 2.40GHz      | 6381 |
| [Dual CPU] Intel Xeon E5-2407 v2 @ 2.40GHz | 6359 |
| [Dual CPU] AMD Opteron 8439 SE             | 6306 |
| [Dual CPU] Intel Xeon W5580 @ 3.20GHz      | 6270 |
| [Dual CPU] Intel Xeon E7- 4807 @ 1.87GHz   | 6223 |
| [Dual CPU] Intel Xeon E5-2609 @ 2.40GHz    | 5982 |
| [Dual CPU] Intel Xeon X5570 @ 2.93GHz      | 5980 |
| [Dual CPU] Intel Xeon X5550 @ 2.67GHz      | 5618 |
| [Dual CPU] Intel Xeon E5-2407 @ 2.20GHz    | 5421 |
| [Quad CPU] AMD Opteron 8356                | 5397 |
| [Dual CPU] Intel Xeon X5492 @ 3.40GHz      | 5270 |
| [Dual CPU] Intel Xeon X5560 @ 2.80GHz      | 5229 |
| [Dual CPU] Intel Xeon L5630 @ 2.13GHz      | 5158 |
| [Dual CPU] Intel Xeon X5470 @ 3.33GHz      | 5114 |
| [Dual CPU] Intel Xeon E5540 @ 2.53GHz      | 5084 |
| [Dual CPU] Intel Xeon X5482 @ 3.20GHz      | 5069 |
| [Dual CPU] Intel Xeon E5607 @ 2.27GHz      | 5027 |
| [Dual CPU] Intel Xeon E5-2603 v2 @ 1.80GHz | 4969 |
| [Dual CPU] Intel Xeon E5530 @ 2.40GHz      | 4929 |
| [Dual CPU] Intel Xeon X5460 @ 3.16GHz      | 4842 |
| [Dual CPU] Intel Xeon X5472 @ 3.00GHz      | 4815 |
| [Dual CPU] Intel Xeon E5472 @ 3.00GHz      | 4765 |
| [Dual CPU] Intel Xeon X5450 @ 3.00GHz      | 4578 |
| [Dual CPU] AMD Opteron 2427                | 4499 |
| [Dual CPU] Intel Xeon E5450 @ 3.00GHz      | 4492 |
| [Dual CPU] Intel Xeon E5440 @ 2.83GHz      | 4468 |
| [Dual CPU] Intel Xeon E5520 @ 2.27GHz      | 4438 |
| [Dual CPU] Intel Xeon E5-2603 @ 1.80GHz    | 4433 |
| [Dual CPU] Intel Xeon E5462 @ 2.80GHz      | 4399 |
| [Dual CPU] AMD Opteron 2435                | 4377 |
| [Dual CPU] Intel Xeon E5430 @ 2.66GHz      | 4252 |
| [Dual CPU] Intel Xeon L5430 @ 2.66GHz      | 4231 |
| [Dual CPU] Intel Xeon X5365 @ 3.00GHz      | 4123 |

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|---------------------------------------|------|
| <b>PassMark multi CPU systems</b>     |      |
| [Dual CPU] AMD Opteron 2387           | 4105 |
| [Dual CPU] Intel Xeon E5507 @ 2.27GHz | 3954 |
| [Dual CPU] Intel Xeon L5420 @ 2.50GHz | 3933 |
| [Dual CPU] Intel Xeon E5420 @ 2.50GHz | 3927 |
| [Dual CPU] Intel Xeon X5355 @ 2.66GHz | 3848 |
| [Dual CPU] Intel Xeon E5410 @ 2.33GHz | 3774 |
| [Dual CPU] Intel Xeon L5506 @ 2.13GHz | 3706 |
| [Dual CPU] Intel Xeon E5506 @ 2.13GHz | 3613 |
| [Dual CPU] Intel Xeon E5606 @ 2.13GHz | 3593 |
| [Dual CPU] Intel Xeon E5345 @ 2.33GHz | 3406 |
| [Dual CPU] Intel Xeon E5504 @ 2.00GHz | 3280 |
| [Dual CPU] AMD Opteron 2356           | 3211 |
| [Dual CPU] Intel Xeon L5520 @ 2.27GHz | 3119 |
| [Dual CPU] Intel Xeon E5320 @ 1.86GHz | 2762 |
| [Quad CPU] AMD Opteron 885            | 2696 |
| [Dual CPU] Intel Xeon X5260 @ 3.33GHz | 2389 |
| [Dual CPU] Intel Xeon 5160 @ 3.00GHz  | 2175 |
| [Dual CPU] Intel Xeon 5150 @ 2.66GHz  | 1884 |
| [Dual CPU] Intel Xeon 5140 @ 2.33GHz  | 1639 |
| [Dual CPU] Intel Xeon 5130 @ 2.00GHz  | 1581 |
| [Dual CPU] Intel Xeon 3.73GHz         | 1511 |
| [Dual CPU] Intel Xeon 5120 @ 1.86GHz  | 1486 |
| [Dual CPU] AMD Opteron 285            | 1441 |
| [Dual CPU] AMD Opteron 290            | 1430 |