

processor : 0  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 2006.391  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 0  
cpu cores : 10  
apicid : 0  
initial apicid : 0  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 1  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1240.324  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 1  
cpu cores : 10  
apicid : 2  
initial apicid : 2  
fpu : yes

fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 2  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 2  
cpu cores : 10  
apicid : 4  
initial apicid : 4  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 3  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 3  
cpu cores : 10  
apicid : 6  
initial apicid : 6  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 4  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 4  
cpu cores : 10  
apicid : 8  
initial apicid : 8

fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 5  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 3600.000  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 8  
cpu cores : 10  
apicid : 16  
initial apicid : 16  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual

power management:

processor : 6  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 9  
cpu cores : 10  
apicid : 18  
initial apicid : 18  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 sse3 cx16 xtptr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 7  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 10  
cpu cores : 10  
apicid : 20

initial apicid : 20  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 8  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 2057.209  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 11  
cpu cores : 10  
apicid : 22  
initial apicid : 22  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64

address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 9  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 12  
cpu cores : 10  
apicid : 24  
initial apicid : 24  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 10  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 1  
siblings : 20  
core id : 0  
cpu cores : 10

apicid : 32  
initial apicid : 32  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 11  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 1  
siblings : 20  
core id : 1  
cpu cores : 10  
apicid : 34  
initial apicid : 34  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64



cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 12  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 1  
siblings : 20  
core id : 2  
cpu cores : 10  
apicid : 36  
initial apicid : 36  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 13  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 2943.349  
cache size : 25600 KB  
physical id : 1  
siblings : 20  
core id : 3

cpu cores : 10  
apicid : 38  
initial apicid : 38  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 14  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 2320.216  
cache size : 25600 KB  
physical id : 1  
siblings : 20  
core id : 4  
cpu cores : 10  
apicid : 40  
initial apicid : 40  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23

clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 15  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 2992.689  
cache size : 25600 KB  
physical id : 1  
siblings : 20  
core id : 8  
cpu cores : 10  
apicid : 48  
initial apicid : 48  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 16  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 2300.000  
cache size : 25600 KB  
physical id : 1  
siblings : 20

core id : 9  
cpu cores : 10  
apicid : 50  
initial apicid : 50  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 17  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 1  
siblings : 20  
core id : 10  
cpu cores : 10  
apicid : 52  
initial apicid : 52  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown

bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 18  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 2992.825  
cache size : 25600 KB  
physical id : 1  
siblings : 20  
core id : 11  
cpu cores : 10  
apicid : 54  
initial apicid : 54  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 19  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 2992.474  
cache size : 25600 KB  
physical id : 1

siblings : 20  
core id : 12  
cpu cores : 10  
apicid : 56  
initial apicid : 56  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 20  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 0  
cpu cores : 10  
apicid : 1  
initial apicid : 1  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d

bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 21  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 1  
cpu cores : 10  
apicid : 3  
initial apicid : 3  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d

bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 22  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1453.896

cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 2  
cpu cores : 10  
apicid : 5  
initial apicid : 5  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 23  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1719.542  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 3  
cpu cores : 10  
apicid : 7  
initial apicid : 7  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c



rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 24  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 2042.948  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 4  
cpu cores : 10  
apicid : 9  
initial apicid : 9  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 25  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4

microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 8  
cpu cores : 10  
apicid : 17  
initial apicid : 17  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 26  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 2430.499  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 9  
cpu cores : 10  
apicid : 19  
initial apicid : 19  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfperf pni pclmulqdq dtes64 monitor ds\_cpl smx est

tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 27  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 10  
cpu cores : 10  
apicid : 21  
initial apicid : 21  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 28  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz

stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 11  
cpu cores : 10  
apicid : 23  
initial apicid : 23  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 sse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 29  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 2558.396  
cache size : 25600 KB  
physical id : 0  
siblings : 20  
core id : 12  
cpu cores : 10  
apicid : 25  
initial apicid : 25  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts

rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 30  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 1  
siblings : 20  
core id : 0  
cpu cores : 10  
apicid : 33  
initial apicid : 33  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 31  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62

model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 1  
siblings : 20  
core id : 1  
cpu cores : 10  
apicid : 35  
initial apicid : 35  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 32  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 1  
siblings : 20  
core id : 2  
cpu cores : 10  
apicid : 37  
initial apicid : 37  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes

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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 33  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 1  
siblings : 20  
core id : 3  
cpu cores : 10  
apicid : 39  
initial apicid : 39  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes

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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 34  
vendor\_id : GenuineIntel

cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 1  
siblings : 20  
core id : 4  
cpu cores : 10  
apicid : 41  
initial apicid : 41  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 35  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 1  
siblings : 20  
core id : 8  
cpu cores : 10  
apicid : 49  
initial apicid : 49  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13



wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 36  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 1  
siblings : 20  
core id : 9  
cpu cores : 10  
apicid : 51  
initial apicid : 51  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes

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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 37

vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1400.000  
cache size : 25600 KB  
physical id : 1  
siblings : 20  
core id : 10  
cpu cores : 10  
apicid : 53  
initial apicid : 53  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 38  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 1  
siblings : 20  
core id : 11  
cpu cores : 10  
apicid : 55  
initial apicid : 55  
fpu : yes  
fpu\_exception : yes

cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management:

processor : 39  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 62  
model name : Intel(R) Xeon(R) CPU E5-2690 v2 @ 3.00GHz  
stepping : 4  
microcode : 0x42e  
cpu MHz : 1200.000  
cache size : 25600 KB  
physical id : 1  
siblings : 20  
core id : 12  
cpu cores : 10  
apicid : 57  
initial apicid : 57  
fpu : yes  
fpu\_exception : yes  
cpuid level : 13  
wp : yes  
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 arch\_perfmon pebs bts  
rep\_good nopl xtopology nonstop\_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds\_cpl smx est  
tm2 ssse3 cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic popcnt tsc\_deadline\_timer aes xsave avx f16c  
rdrand lahf\_lm cpuid\_fault epb pti ssbd ibrs ibpb stibp fsgsbase smep erms xsaveopt dtherm ida arat  
pln pts md\_clear flush\_l1d  
bugs : cpu\_meltdown spectre\_v1 spectre\_v2 spec\_store\_bypass l1tf mds swapgs itlb\_multihit  
mmio\_unknown  
bogomips : 5985.23  
clflush size : 64  
cache\_alignment : 64  
address sizes : 46 bits physical, 48 bits virtual  
power management: