Hi SDE Team,

I am using latest SDE version 9.58 and experiencing a strange problem on AMD targets.

When I try to query target supported MaxVectorSize through Java virtual machine on an x86 AVX512 AMD Ryzen 7 system it reports incorrect value as 16 bytes, without SDE I see correct value i.e. 64 bytes.

PROMPT>sde64 --version

Intel(R) Software Development Emulator. Version: 9.58.0 external (0)

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PROMPT>java --version

openjdk 25-ea 2025-09-16

OpenJDK Runtime Environment (build 25-ea+27-3363)

OpenJDK 64-Bit Server VM (build 25-ea+27-3363, mixed mode, sharing)

PROMPT>java -XX:+PrintFlagsFinal --version | grep MaxVectorSize

intx MaxVectorSize = 64 {C2 product} {default}

PROMPT>sde64 -dmr -- java -XX:+PrintFlagsFinal --version | grep MaxVectorSize

intx MaxVectorSize = 16 {C2 product} {default}

I spent some time to debug the issue, it could be in the OS state save / restoration, but I also see some strange non-determinisim around VPBROADCASTD instruction. Original value in lower 32 bits of XMM0 is not broadcasted to all the lanes of ZMM0 register, please refer screenshot of issue in the attachment.

Let me know if you need more information from my end.

Best Regards,

Jatin



