ERRORS IN 64 bit AA MODEL

Here, the errors while running the 64 bit examples, on the 64 bit AA mdel are given. The error is mentioned first, and the list of instructions corresponding to that error are given.

1. All outputs are always 0. This includes outputs to psr, which sets the flags.

    a. All MULD instructions - UMULD, UMULDCC, SMULD,, SMULDCC.
    b. All Floating Point insts. - fstoh, fhtos, faddreduce16, vfhi16toh, vfhtoi16
    c. All vector Floats – vfaddd16/32, vfmul16/32, vfsub16/32

2. Errors in setting flags , please refer to **AA64_errors.pdf** for details on each instruction.
    ADDDCC, SUBDCC, UDIVDCC, SDIVDCC

3. Program error - segmentation fault! giving up!!
    CSWAP, CSWAPA

4. For VADDD8 and VADDD16 - For the lower 32 bits output is similar to vaddd32. Upper 32 bits are correct as expected.

    a. VADDD8 – Following table gives the error in the lower 32 bits of the output

Error	Expected output	Actual outputt
Carry of previous iteration is taken forward.	E0 08 98 f2	E0 09 99 f2

    b.VADDD16 – Following table gives the error in the lower 32 bits of the output

Error	Expected output	Actual outputt
Carry of previous iteration is taken forward.	E008 99f2	E009 99f2