| LOAD_W | LOAD_D | CALC_F | Vir_SAVE | Vir_LOAD_W | LOAD_D | CALC_F | SAVE |

(a) Input instruction sequence. (VI-ISA from DDR)

| LOAD_D | LOAD_W | CALC_F | LOAD_W | CALC_F | SAVE |

(b) Executed sequence when no interrupt. (Original ISA to accelerator)
Virtual Instructions are deleted.

| LOAD_W | LOAD_D | CALC_F | SAVE | LOAD_W | LOAD_D | CALC_F | SAVE |

(c) Executed sequence when interrupt occurs. (Original ISA to accelerator)
Virtual Instructions (Blue) are executed. Normal SAVE (Red) is modified.