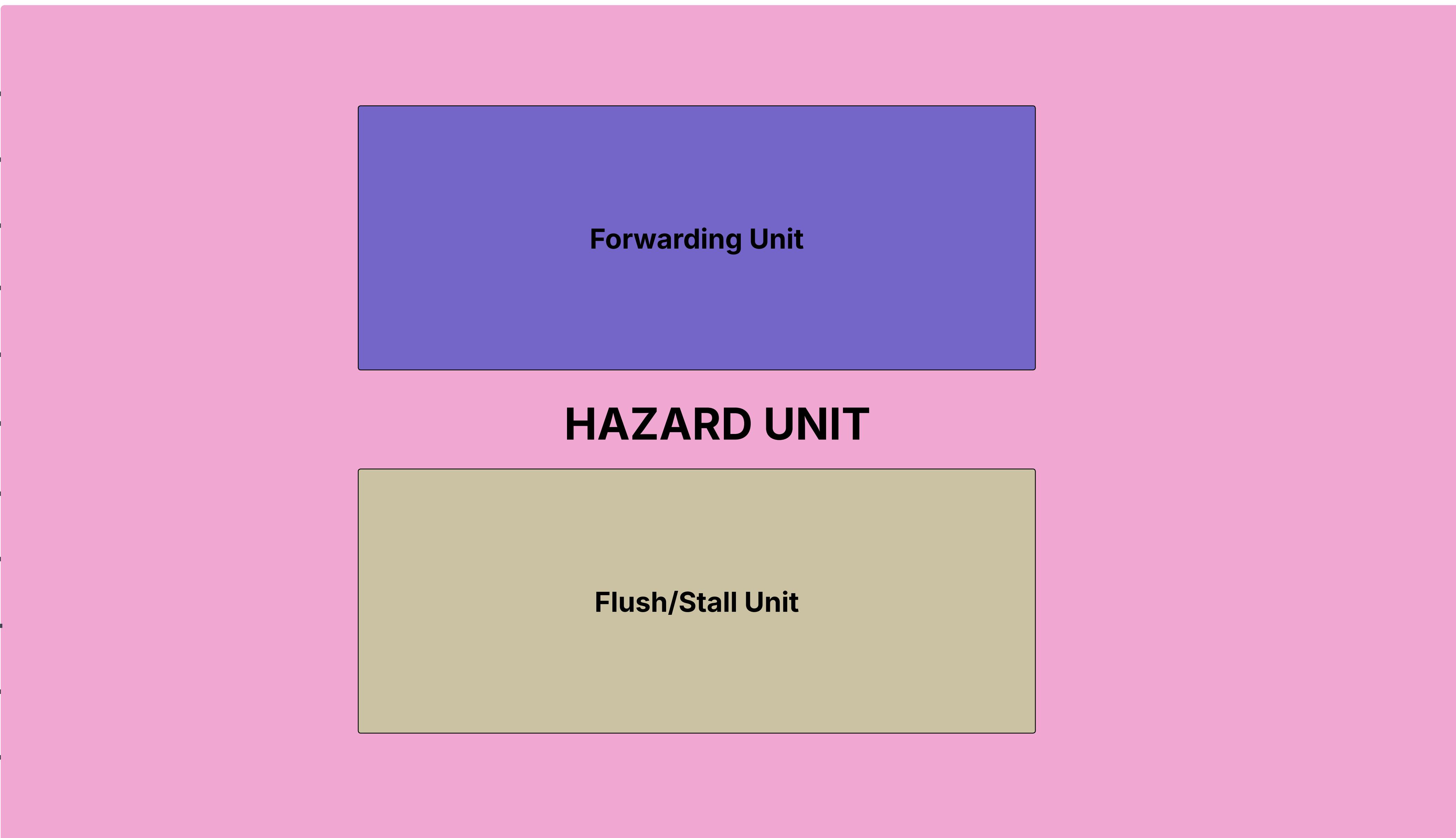**HAZARD UNIT**

Inputs (left):
- rs1_addr_execute
- rs2_addr_execute
- rd_memory
- rd_writeback
- reg_file_we_memory
- reg_file_we_writeback
- jump_pc_valid_execute
- rs1_addr_decode
- rs2_addr_decode
- rd_execute
- data_mem_re_execute

Internal units:
- Forwarding Unit
- Flush/Stall Unit

Outputs (right):
- forward_rs1 — to Execute Stage
- forward_rs2 — to Execute Stage
- Flush_IF_ID_Register — to Fetch Stage
- Flush_ID_EX_Register — to Decode Stage
- Stall_PC_FF — to Fetch Stage
- Stall_IF_ID_Register — to Fetch Stage