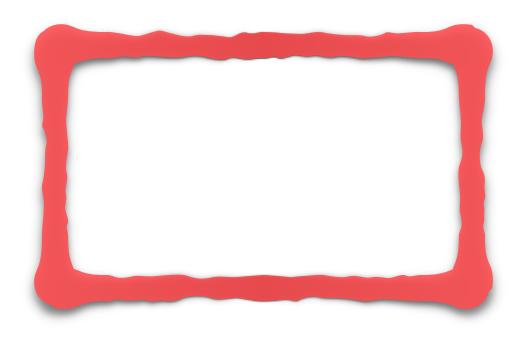


```
wire [N HARTS-1:0] hart instr data vld nxt = \{\{N \mid HARTS-1\{1'b0\}\}\},
  acmd_state_nxt == S_ISSUE_REGREAD || acmd_state_nxt == S_ISSUE_REGWRITE || acmd_state_nxt == S_ISSUE_REGEBREAK ||
  acmd_state_nxt == S_ISSUE_PROGBUF0 || acmd_state_nxt == S_ISSUE_PROGBUF1 || acmd_state_nxt == S_ISSUE_IMPEBREAK
} << hartsel;</pre>
wire [31:0] hart_instr_data_nxt =
                                                        {20'd0, acmd_regno, 7'd0} : // csrr xx, dmdata0
  acmd state nxt == S ISSUE REGWRITE ? 32'hbff02073
                                                        {12'd0, acmd_regno, 15'd0} : // csrw dmdata0, xx
  acmd_state_nxt == S_ISSUE_REGREAD
                                       ? 32 hbff01073
  acmd_state_nxt == S_ISSUE_PROGBUF0 ? progbuf0
  acmd_state_nxt == S_ISSUE_PROGBUF1 ? progbuf1
                                         32 h00100073;
                                                                                        ebreak
```



## Abstract Access Memory RP2350 Hazard3 Core

```
wire [N_HARTS-1:0] hart_instr_data_vld_nxt = {{N_HARTS-1{1'b0}},
  acmd_state_nxt == S_ISSUE_REGREAD || acmd_state_nxt == S_ISSUE_REGWRITE || acmd_state_nxt == S_ISSUE_REGEBREAK ||
  acmd_state_nxt == S_ISSUE_PROGBUF0 || acmd_state_nxt == S_ISSUE_PROGBUF1 ||
                                                                               acmd state nxt == S ISSUE IMPEBREAK
} << hartsel;</pre>
wire [31:0] hart_instr_data_nxt =
  acmd_state_nxt == S_ISSUE_REGWRITE
                                      ? 32'hbff02073
                                                       {20'd0, acmd_regno, 7'd0} :
                                                                                     // csrr xx, dmdata0
                                                                                     // csrw dmdata0, xx
                                      ? 32 hbff01073
                                                       {12'd0, acmd_regno, 15'd0}
  acmd_state_nxt == S_ISSUE_REGREAD
  acmd_state_nxt == S_ISSUE_PROGBUF0
                                      ? progbuf0
  acmd_state_nxt == S_ISSUE_PR0GBUF1
                                        progbuf1
                                        32 h00100073;
                                                                                       ebreak
```

https://github.com/Wren6991/Hazard3/blob/stable/hdl/debug/dm/hazard3\_dm.v lines 745-755

## System Bus Access