# CV32E40P RTL Version 120ac3c # OneSpin Version 2021.1.0 # build date: Jan 7 2021 18:37:56 # license mode:default # flexera:11.15.1.0 # platform: Linux x86 64 RV32C 1 Property 'RV chk.ops.RVC.Branch a' holds 2 Property 'RV chk.ops.RVC.Mem a' holds 3 Property 'RV chk.ops.RVC.Mem MA a' holds 4 Property 'RV chk.ops.RVC.Jump a' holds 5 Property 'RV chk.ops.RVC.Arith a' holds 6 Property 'RV chk.ops.RVC.Branch taken a' holds RV32I & RV32Zcsri 1 Property 'RV chk.ops.reset a' holds 2 Property 'RV chk.ops.bubble a' holds 3 Property 'RV chk.ops.RV32I.CSR flush a' holds 4 Property 'RV chk.ops.RV32I.FENCE I a' holds 5 Property 'RV\_chk.ops.RV32I.WFI flush a' holds 6 Property 'RV\_chk.ops.RV32I.Mem\_MA\_a' holds

7 Property 'RV chk.ops.RV32I.Jump a'

8 Property 'RV chk.ops.RV32I.Mem a'

9 Property 'RV chk.ops.RV32I.CSR a'

11 Property 'RV chk.ops.RV32I.Branch a'

12 Property 'RV chk.ops.RV32I.WFI sleep a'

15 Property 'RV chk.ops.RV32I.EBREAK BP DM a'

16 Property 'RV chk.ops.RV32I.EBREAK DBG a'

18 Property 'RV\_chk.ops.RV32I.Branch\_taken\_a'

13 Property 'RV\_chk.ops.RV32I.WFI\_nop\_a'

17 Property 'RV chk.ops.RV32I.CallBreak a'

10 Property 'RV chk.ops.RV32I.Arith a'

14 Property 'RV chk.ops.RV32I.RET a'

	RV32IMC Exceptions	
1	Property 'RV_chk.ops.xcpt_DBG_BP_a'	holds
2	Property 'RV_chk.ops.xcpt_fetch_dec_a'	holds

R	RV32M		Notes
1 F	Property 'RV_chk.ops.RV32M.mul_a'	holds	*partial proof
2 F	Property 'RV_chk.ops.RV32M.mulh_a'	holds	*partial proof
3 F	Property 'RV_chk.ops.RV32M.mulhsu_a'	holds	*partial proof
4 F	Property 'RV_chk.ops.RV32M.mulhu_a'	holds	*partial proof
5 P	Property 'RV_chk.ops.RV32M.genblk1[10].div_a'	holds	*partial proof for div, divu, rem, remu (latency 10)
6 P	Property 'RV_chk.ops.RV32M.genblk1[11].div_a'	holds	*partial proof for div, divu, rem, remu (latency 11)
7 P	Property 'RV_chk.ops.RV32M.genblk1[12].div_a'	holds	*partial proof for div, divu, rem, remu (latency 12)
8 P	Property 'RV_chk.ops.RV32M.genblk1[13].div_a'	holds	*partial proof for div, divu, rem, remu (latency 13)
9 P	Property 'RV_chk.ops.RV32M.genblk1[14].div_a'	holds	*partial proof for div, divu, rem, remu (latency 14)
10 P	Property 'RV_chk.ops.RV32M.genblk1[15].div_a'	holds	*partial proof for div, divu, rem, remu (latency 15)
11 P	Property 'RV_chk.ops.RV32M.genblk1[16].div_a'	holds	*partial proof for div, divu, rem, remu (latency 16)
12 P	Property 'RV_chk.ops.RV32M.genblk1[17].div_a'	holds	_*partial proof for div, divu, rem, remu (latency 17)
13 P	Property 'RV_chk.ops.RV32M.genblk1[18].div_a'	holds	*partial proof for div, divu, rem, remu (latency 18)
14 P	Property 'RV_chk.ops.RV32M.genblk1[19].div_a'	holds	*partial proof for div, divu, rem, remu (latency 19)
15 P	Property 'RV_chk.ops.RV32M.genblk1[2].div_a'	holds	*partial proof for div, divu, rem, remu (latency 2)
16 P	Property 'RV_chk.ops.RV32M.genblk1[20].div_a'	holds	*partial proof for div, divu, rem, remu (latency 20)
	Property 'RV_chk.ops.RV32M.genblk1[21].div_a'	holds	*partial proof for div, divu, rem, remu (latency 21)
	Property 'RV_chk.ops.RV32M.genblk1[22].div_a'	holds	*partial proof for div, divu, rem, remu (latency 22)
19 P	Property 'RV_chk.ops.RV32M.genblk1[23].div_a'	holds	*partial proof for div, divu, rem, remu (latency 23)
20 P	Property 'RV_chk.ops.RV32M.genblk1[24].div_a'	holds	*partial proof for div, divu, rem, remu (latency 24)
21 P	Property 'RV_chk.ops.RV32M.genblk1[25].div_a'	holds	*partial proof for div, divu, rem, remu (latency 25)
22 P	Property 'RV_chk.ops.RV32M.genblk1[26].div_a'	holds	*partial proof for div, divu, rem, remu (latency 26)
23 P	Property 'RV_chk.ops.RV32M.genblk1[27].div_a'	holds	*partial proof for div, divu, rem, remu (latency 27)
24 P	Property 'RV_chk.ops.RV32M.genblk1[28].div_a'	holds	*partial proof for div, divu, rem, remu (latency 28)
25 P	Property 'RV_chk.ops.RV32M.genblk1[29].div_a'	holds	*partial proof for div, divu, rem, remu (latency 29)
26 P	Property 'RV_chk.ops.RV32M.genblk1[3].div_a'	holds	*partial proof for div, divu, rem, remu (latency 3)
27 P	Property 'RV_chk.ops.RV32M.genblk1[30].div_a'	holds	*partial proof for div, divu, rem, remu (latency 30)

28	Property 'RV_chk.ops.RV32M.genblk1[31].div_a'	holds	*partial proof for div, divu, rem, remu (latency 31)
29	Property 'RV_chk.ops.RV32M.genblk1[32].div_a'	holds	*partial proof for div, divu, rem, remu (latency 32)
30	Property 'RV_chk.ops.RV32M.genblk1[33].div_a'	holds	*partial proof for div, divu, rem, remu (latency 33)
31	Property 'RV_chk.ops.RV32M.genblk1[34].div_a'	holds	*partial proof for div, divu, rem, remu (latency 34)
32	Property 'RV_chk.ops.RV32M.genblk1[4].div_a'	holds	*partial proof for div, divu, rem, remu (latency 4)
33	Property 'RV_chk.ops.RV32M.genblk1[5].div_a'	holds	*partial proof for div, divu, rem, remu (latency 5)
34	Property 'RV_chk.ops.RV32M.genblk1[6].div_a'	holds	*partial proof for div, divu, rem, remu (latency 6)
35	Property 'RV_chk.ops.RV32M.genblk1[7].div_a'	holds	*partial proof for div, divu, rem, remu (latency 7)
36	Property 'RV_chk.ops.RV32M.genblk1[8].div_a'	holds	*partial proof for div, divu, rem, remu (latency 8)
37	Property 'RV_chk.ops.RV32M.genblk1[9].div_a'	holds	*partial proof for div, divu, rem, remu (latency 9)

\*partial proof - completely unrestricted and unbounded proof that "just" does not check the value of X[rd], but performs all other checks required for instructions. Regression run with 4 most significant bits and 4 least significant bits of either operands free and the remaining bits all set to the same value - all 0 or all 1

