

BSV CODING STYLE GUIDE FOR SHAKTI

File settings:

1. Use indent of 2-spaces. All tabs should elaborate into 2 spaces.
2. Indentation should be maintained across entire code.
3. Every line of your code should never exceed 100 characters.

General variable naming:

4. Variable/Rule/Method/package/Interface names should never have Large-Caps in between (no CamelCase)
 - a. Eg. Integer thisVariableIsBAD - **This is bad style**
5. Use underscore to separate words within a variable name:
 - a. Integer my_new_variable = 0;

Package, Interface and Module naming:

6. Name of package should be the same as the name of the file (BSV mandate).
 - a. <package_name>
 - b. Eg. " package adder; " for adder.bsv
7. Package names should start with a lower case only
8. There should be only one module per package.
9. Name of interface should start with "Ifc_" followed by <package_name>
 - a. " Interface Ifc_adder; "
10. Name of the module should start with "mk" followed by <package_name>
 - a. "module mkadder (Ifc_adder); "

Data Type naming:

11. All register variable should start with "rg_"
 - a. `Reg#(Bool) rg_start <- mkReg(False);`
12. All wire variables should start with "wr_"
 - a. `Wire#(Bool) wr_end <- mkWire();`
13. All FIFOs to start with "ff_"
14. All Array structures to start with "arr_"
15. All Vector of registers to start with "vrg_"
16. All Vector of FIFOs to start with "vff_"
17. Vector of variables to start with "v_"
18. RegFile structures to start with "rf_"
19. All local variables within rules/methods/functions should start with "lv_"
20. All global variables within a module should start with "gv_"

Structure Naming:

21. All custom "typedef enum" types to end with "_e"
22. All custom "typedef struct" types to end with "_s"
23. All custom "typedef union" types to end with "_u"

Rule Naming:

24. All rules to start with "rl_" followed by any name of the rule.
 - a. `rule rl_myrule_name;`

Function Naming:

25. All function names to start with "fn_" followed by any name of the function.

Method Naming:

26. All action methods to start with "ma_" followed by any name.
27. All value methods to start with "mn_" followed by any name.
28. All ActionValue Methods to start with "mav_" followed by any name.

Commenting:

29. Do not use block-comments `/* */` Comment each line of code using `//`
 - a. `// My first line of comment`
`// My second line of comment`
`// My third line of comment`
`rule rl_my_new_rule;`
30. Each rule should be preceded by a comment describing what the rule does. Same goes for methods as well.