```
unsaved 🗥
  \equiv
EDITOR
         ✓ NAV-TLV
                            CODE-EXAMPLES X
                     LOG
    \m5_TLV_version 1d: tl-x.org
 2 ▼ \SV
 3
        `include "sqrt32.v";
 4
       m4_include_lib(https://raw.githubusercontent.com/stevehoover/make
 5
 6
       m5_makerchip_module
 7 ▼ \TLV
 8
       // Stimulus
 9
10 ▼
       calc
11 ▼
           @0
              $valid = & $rand_valid[1:0]; // Valid with 1/4 probability
12 ▼
13
                                              // (& over two random bits).
14
       // DUT (Design Under Test)
15
       calc
16 ▼
17 ▼
           ?$valid
18
              // Pythagoras's Theorem
              @1
19 ▼
20
                 a_sq[7:0] = a_a[3:0] ** 2;
                 bb_sq[7:0] = bb[3:0] ** 2;
21
22 ▼
              @2
23
                 c_{sq}[8:0] = a_{sq} + b_{sq};
24 ▼
              @3
25
                 cc[4:0] = sqrt(cc_sq);
26
27
28
29
                 // VIZ and LOG output.
30
                 // Note that this can affect the logic in the DIAGRAM. Y
31
                 m5+pythagorean_viz_and_log(1)
32 ▼ \SV
33 ▼
       endmodule
34
35
                         `include "sqrt32.v";
36
37
```

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