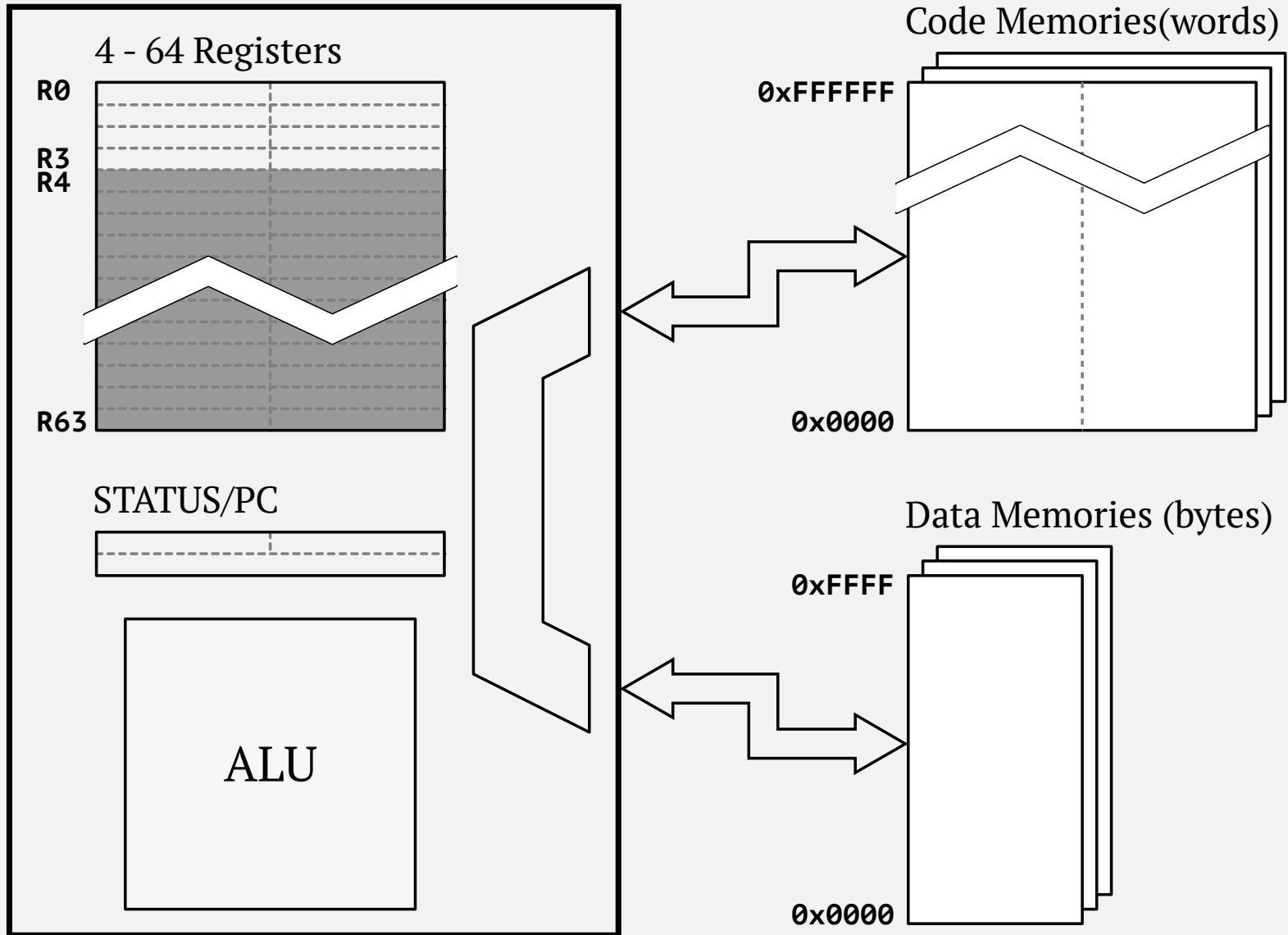


AAP

An Altruistic Processor: Update
Simon Cook, Ed Jones, Jeremy Bennett



- ISA stable
- Code memory width optionally 16/24 bit
 - play with non-power-of-2 units
- Data memory with optionally 8/16/24 bit
 - play with non-octet chars
- AAP patches submitted and reviewed for LLVM
 - need to demonstrate a community

- “In progress”
 - 16-bit instructions only, 16 registers only
 - UART for debug

- Status

- compiles and executes on Verilator

000000: 14 01 ADD R0, R0, #1

000001: 41 FF BRA.s -1

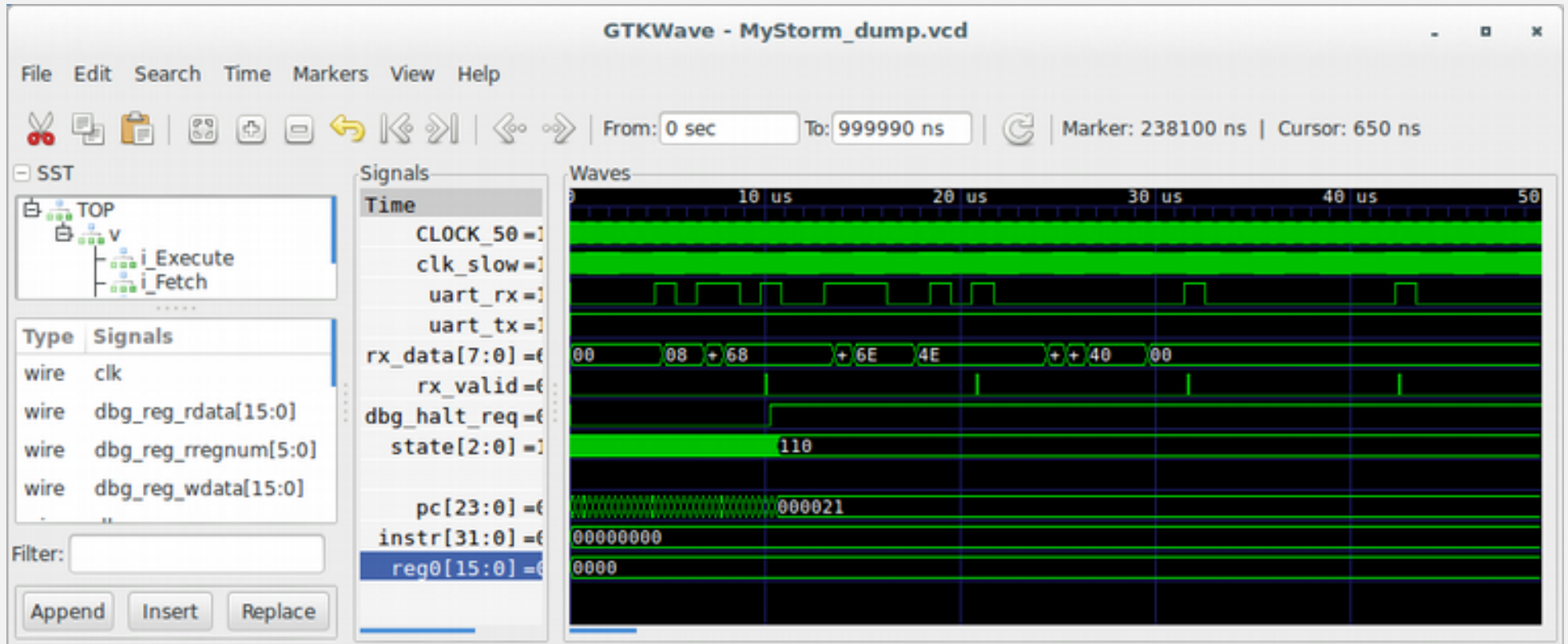
- synthesizes for MyStorm using Yosys
 - no memory chip on my board :-)

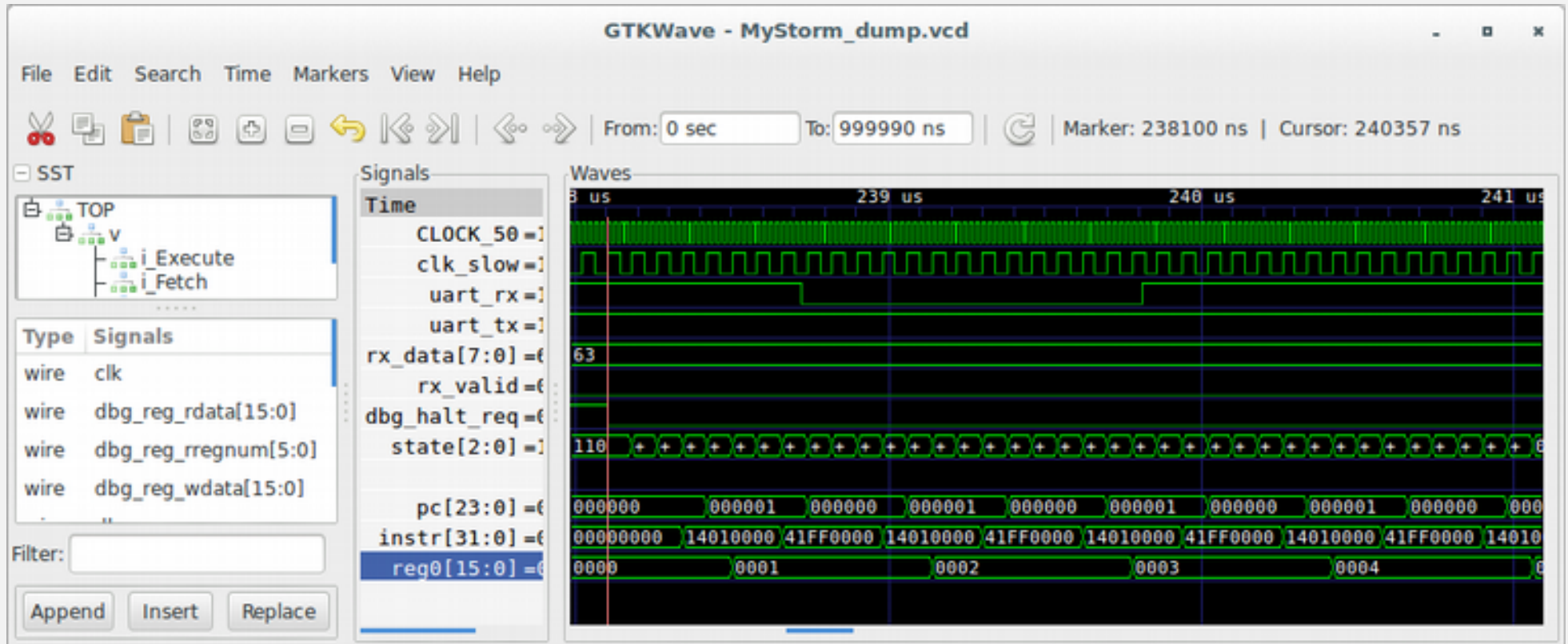
```
promoted 7 nets
  1 sr/we
  4 cen/wclke
  2 clk
7 globals
  1 sr/we
  4 cen/wclke
  2 clk
realize_constants...
  realized 1
place...
  initial wire length = 65088
  at iteration #50: temp = 10.0458, wire length = 71140
  ...
  at iteration #250: temp = 0.00397257, wire length = 15510
  final wire length = 15359
After placement:
PIOs      32 / 107
PLBs      686 / 960
BRAMs     0 / 32

  place time 39.63s
route...
  pass 1, 254 shared.
  ...
  pass 12, 0 shared.

After routing:
span_4    10264 / 29696
span_12   1649 / 5632

  route time 48.31s
```





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