

SyncSim

A general synchronous circuit simulator

SyncSim

Platform independent
Extensible and general

GUI

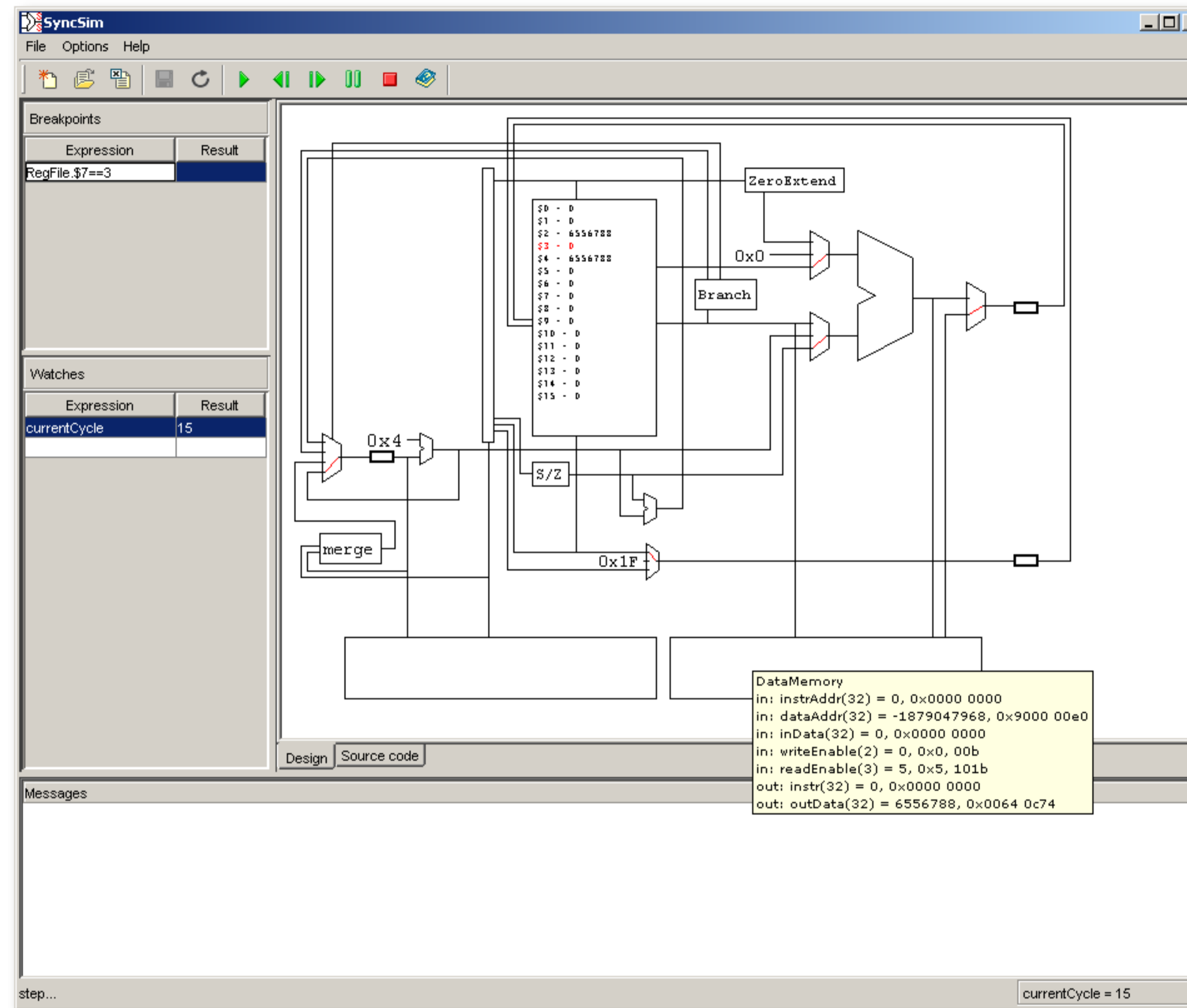
Easy to use
Responsive
Source code editor

Simulator

Breakpoint expressions
Watches
Forward and backward step functionality

MIPS model

Good graphical layout
Run a subset of MIPS code
Forseeable



SyncSim GUI displaying a MIPS implementation.

```
ffffff80020090 g 0 *ABS*0000000000000000 __bss_start
ffffff80020040 g F .text0000000000000048 main
ffffff80020090 g 0 .sbss0000000000000000 __sbss_end
ffffff80020090 g 0 *ABS*0000000000000000 _edata
ffffff80020090 g 0 *ABS*0000000000000000 _end
ffffff80020088 g 0 .text0000000000000000 _encode
ffffff80020090 g 0 *ABS*0000000000000000 _fbss
ffffff8002008c g 0 .sdata0000000000000004 mystik

Disassembly of section .text:
ffffff80020000 <mul__Fi>:
ffffff80020004: 27bdfff8 addiu$sp,$sp,-8
ffffff80020004: afbe0000 sw$8,0($sp)
ffffff80020008: 03a0f025 movef$8,$sp
ffffff8002000c: afc40008 sw$a0,8($f8)
int test = 65;
int mystik = 2;
int mul(int in) {
    return in*test+mystik;
ffffff80020010: 8fc30008 lw$v1,8($f8)
ffffff80020014: 8f828008 lw$v0,-32760($gp)
ffffff80020018: 00000000 nop
ffffff8002001c: 00621021 addu$f0,$v1,$v0
ffffff80020020: 8f83800c lw$v1,-32756($gp)
ffffff80020024: 00000000 nop
ffffff80020028: 00431021 addu$f0,$v0,$v1
}
ffffff8002002c: 03c0e825 movef$sp,$f8
ffffff80020030: 8f8e0000 lw$8,0($sp)
ffffff80020034: 27bd0008 addiu$sp,$sp,8
ffffff80020038: 03a00008 jr$ra
ffffff8002003c: 00000000 nop
ffffff80020040 <main>:
ffffff80020040: 27bdffe0 addiu$sp,$sp,-32
ffffff80020044: afbf001c sw$ra,28($sp)
ffffff80020048: afbe0018 sw$8,24($sp)
ffffff8002004c: 03a0f025 movef$8,$sp
ffffff80020050: afc40020 sw$a0,32($f8)
ffffff80020054: afc50024 sw$a1,36($f8)
int main(int argc, char **argv) {
    int a = 6556788;
ffffff80020058: 3c020064 lui$f0,0x64
ffffff8002005c: 34420c74 ori$f0,$f0,0xc74
ffffff80020060: afc20010 sw$v0.16($f8)
ffffff80020064: afc20010 sw$v0.16($f8)
```

Code view with intermixed assembly and c code

```
Address: 80020010
0x80020010: 8fc30008
0x80020014: 8f828008
0x80020018: 00000000
0x8002001c: 00621021
0x80020020: 8f83800c
0x80020024: 00000000
0x80020028: 00431021
0x8002002c: 03c0e825
0x80020030: 8f8e0000
0x80020034: 27bd0008
0x80020038: 03a00008
0x8002003c: 00000000
0x80020040: 27bdffe0
0x80020044: afbf001c
0x80020048: afbe0018
0x8002004c: 03a0f025
0x80020050: afc40020
0x80020054: afc50024
0x80020058: 3c020064
0x8002005c: 34420c74
0x80020060: afc20010
0x80020064: 8fc40010
0x80020068: 0c008000
0x8002006c: 00000000
0x80020070: 03c0e825
0x80020074: 8f8f001c
0x80020078: 8f8e0018
0x8002007c: 27bd0020
0x80020080: 03a00008
0x80020084: 00000000
0x80020088: 00000041
0x8002008c: 00000002
0x80020090: 00000000
```

Data view