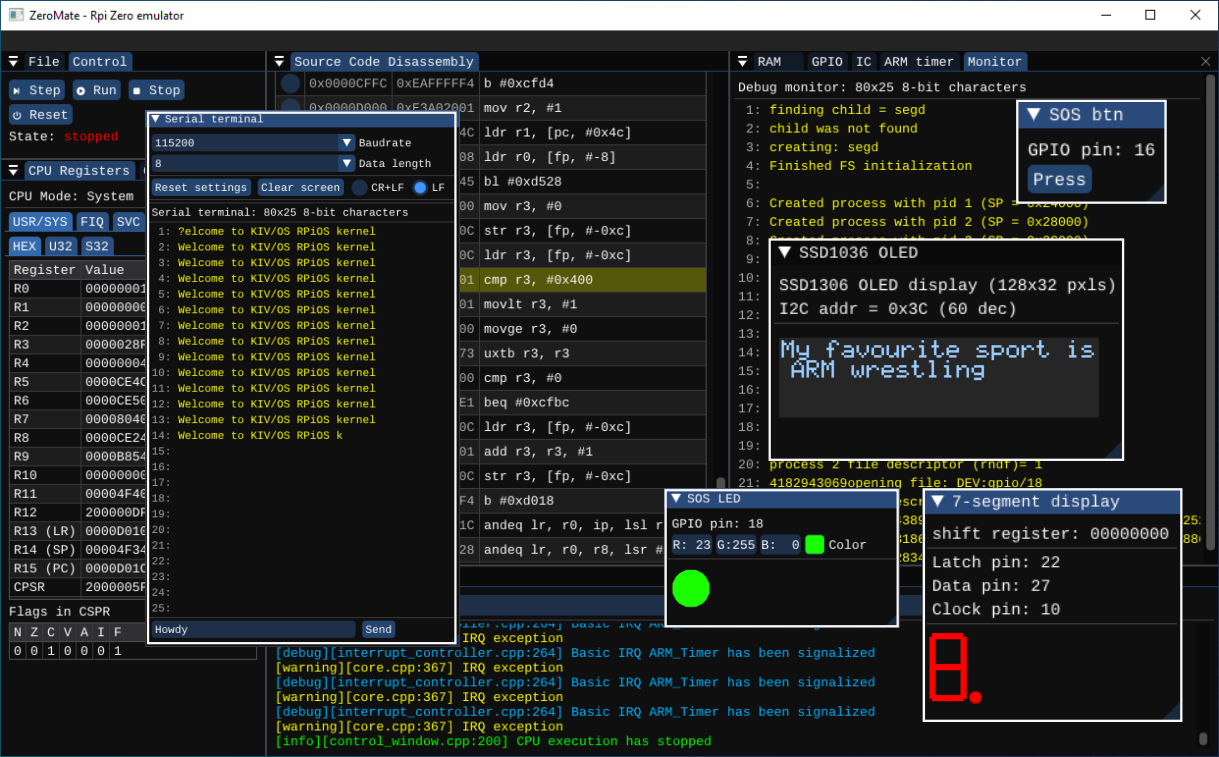
ZeroMate - Rpi Zero emulator
File
Control
Step
Run
Stop
Reset
State: stopped
CPU Registers
CPU Mode: System
USR/SYS
FIQ
SVC
HEX
U32
S32
Register Value
R0 00000001
R1 0000000E
R2 00000001
R3 0000028F
R4 00000004
R5 0000CE4C
R6 0000CE5E
R7 0000804E
R8 0000CE24
R9 0000B854
R10 0000000E
R11 00004F4E
R12 200000DF
R13 (LR) 0000D01E
R14 (SP) 00004F34
R15 (PC) 0000D01C
CPSR 2000005F
Flags in CSPR
N Z C V A I F
0 0 1 0 0 0 1
Source Code Disassembly
0x0000CFFC 0xEAFFFFF4 b #0xcfd4
0x0000D000 0xE3A02001 mov r2, #1
4C ldr r1, [pc, #0x4c]
08 ldr r0, [fp, #-8]
45 bl #0xd528
00 mov r3, #0
0C str r3, [fp, #-0xc]
0C ldr r3, [fp, #-0xc]
01 cmp r3, #0x400
01 movlt r3, #1
00 movge r3, #0
73 uxtb r3, r3
00 cmp r3, #0
E1 beq #0xcfbc
0C ldr r3, [fp, #-0xc]
01 add r3, r3, #1
0C str r3, [fp, #-0xc]
F4 b #0xd018
1C andeq lr, r0, ip, lsl r
28 andeq lr, r0, r8, lsr #
Serial terminal
115200 Baudrate
8 Data length
Reset settings
Clear screen
CR+LF
LF
Serial terminal: 80x25 8-bit characters
1: ?elcome to KIV/OS RPiOS kernel
2: Welcome to KIV/OS RPiOS kernel
3: Welcome to KIV/OS RPiOS kernel
4: Welcome to KIV/OS RPiOS kernel
5: Welcome to KIV/OS RPiOS kernel
6: Welcome to KIV/OS RPiOS kernel
7: Welcome to KIV/OS RPiOS kernel
8: Welcome to KIV/OS RPiOS kernel
9: Welcome to KIV/OS RPiOS kernel
10: Welcome to KIV/OS RPiOS kernel
11: Welcome to KIV/OS RPiOS kernel
12: Welcome to KIV/OS RPiOS kernel
13: Welcome to KIV/OS RPiOS kernel
14: Welcome to KIV/OS RPiOS k
Howdy
Send
RAM
GPIO
IC
ARM timer
Monitor
Debug monitor: 80x25 8-bit characters
1: finding child = segd
2: child was not found
3: creating: segd
4: Finished FS initialization
6: Created process with pid 1 (SP = 0x24000)
7: Created process with pid 2 (SP = 0x28000)
20: process 2 file descriptor (rndf)= 1
21: 4182943069opening file: DEV:gpio/18
SOS btn
GPIO pin: 16
Press
SSD1036 OLED
SSD1306 OLED display (128x32 pxls)
I2C addr = 0x3C (60 dec)
My favourite sport is
ARM wrestling
SOS LED
GPIO pin: 18
R: 23 G:255 B: 0
Color
7-segment display
shift register: 00000000
Latch pin: 22
Data pin: 27
Clock pin: 10
IRQ exception
[debug][interrupt_controller.cpp:264] Basic IRQ ARM_Timer has been signalized
[warning][core.cpp:367] IRQ exception
[debug][interrupt_controller.cpp:264] Basic IRQ ARM_Timer has been signalized
[warning][core.cpp:367] IRQ exception
[debug][interrupt_controller.cpp:264] Basic IRQ ARM_Timer has been signalized
[warning][core.cpp:367] IRQ exception
[info][control_window.cpp:200] CPU execution has stopped