```
rst:0x1 (POWERON RESET), boot:0x1f (SPI FAST FLASH BOOT)
configsip: 0, SPIWP:0xee
clk drv:0x00,q drv:0x00,d drv:0x00,cs0 drv:0x00,hd drv:0x00,wp drv:0x00
mode:DIO, clock div:2
load:0x3fff0018,len:4
load:0x3fff001c,len:6420
load:0x40078000,lean:11624
load:0x40080400,len:6700
entry 0x40080768
I (29) boot: ESP-IDF v3.3-dirty 2nd stage bootloader
I (29) boot: compile time 11:39:28
I (29) boot: Enabling RNG early entropy source...
I (34) boot: SPI Speed
                         : 40MHz
I (38) boot: SPI Mode
                          : DIO
I (42) boot: SPI Flash Size: 8MB
I (46) boot: Partition Table:
                               I (49) boot: ## Label
I (57) boot: 0 nvs
                              WiFi data
                             RF data
I (64) boot: 1 phy init
                                               01 01 0000f000 00001000
I (72) boot: 2 factory
                              factory app
                                              00 00 00010000 00100000
I (79) boot: End of partition table
I (83) esp image: segment 0: paddr=0x00010020 vaddr=0x3f400020
size=0x36680 (222848) map
I (171) esp image: segment 1: paddr=0x000466a8 vaddr=0x3ffb0000
size=0x03698 ( 13976) load
I (176) esp image: segment 2: paddr=0x00049d48 vaddr=0x40080000
size=0x00400 ( 1024) load
0x40080000: WindowOverflow4 at /Users/danjulio/esp/esp-idf/components/
freertos/xtensa vectors.S:1779
I (178) esp image: segment 3: paddr=0x0004a150 vaddr=0x40080400
size=0x05ec0 ( 24256) load
I (196) esp image: segment 4: paddr=0x00050018 vaddr=0x400d0018
size=0xa242c (664620) map
0x400d0018: stext at ??:?
I (430) esp image: segment 5: paddr=0x000f244c vaddr=0x400862c0
size=0x12a64 ( 76388) load
0x400862c0: spi flash write at /Users/danjulio/esp/esp-idf/components/
spi flash/flash ops.c:344
I (476) boot: Loaded app from partition at offset 0x10000
I (476) boot: Disabling RNG early entropy source...
I (477) psram: This chip is ESP32-DOWD
I (483) spiram: Found 64MBit SPI RAM device
I (486) spiram: SPI RAM mode: flash 40m sram 40m
I (491) spiram: PSRAM initialized, cache is in low/high (2-core) mode.
I (498) cpu start: Pro cpu up.
I (502) cpu start: Application information:
I (507) cpu start: Project name: firecam
I (512) cpu_start: App version:
                                  1.0
I (517) cpu start: Compile time: Feb 10 2020 11:39:27
I (523) cpu_start: ELF file SHA256: f435bda4eefeccc3...
I (529) cpu_start: ESP-IDF: v3.3-dirty
```

```
I (534) cpu start: Starting app cpu, entry point is 0x400815ec
0x400815ec: call start cpul at /Users/danjulio/esp/esp-idf/components/
esp32/cpu start.c:270
I (0) cpu start: App cpu up.
I (546) heap init: Initializing. RAM available for dynamic allocation:
I (551) heap init: At 3FFAE6E0 len 00001920 (6 KiB): DRAM
I (557) heap init: At 3FFD4488 len 0000BB78 (46 KiB): DRAM
I (563) heap init: At 3FFE0440 len 00003AE0 (14 KiB): D/IRAM
I (570) heap_init: At 3FFE4350 len 0001BCB0 (111 KiB): D/IRAM
I (576) heap init: At 40098D24 len 000072DC (28 KiB): IRAM
I (582) cpu_start: Pro cpu start user code
I (587) spiram: Adding pool of 4078K of external SPI memory to heap
allocator
I (161) cpu start: Chip Revision: 1
I (162) cpu_start: Starting scheduler on PRO CPU.
I (0) cpu start: Starting scheduler on APP CPU.
I (166) spiram: Reserving pool of 32K of internal memory for DMA/internal
allocations
I (176) main: FireCAM startup
I (176) sys: ESP32 Peripheral Initialization
I (1186) sys: System Peripheral Initialization
I (1186) time utilities: Initial RTC time: Mon Feb 10 12:07:21 2020
I (1716) lepton utilities: Lepton Radiometry = 0
I (1716) lepton utilities: Retry Set Lepton Radiometry
I (1726) lepton utilities: Lepton Radiometry = 1
I (1726) lepton utilities: Lepton Radiometry TLinear = 1
I (1736) lepton utilities: Lepton AGC = 0
I (1746) lepton utilities: Lepton GPIO Mode = 5
I (1746) gpio: GPIO[13] | InputEn: 0 | OutputEn: 1 | OpenDrain: 0 | Pullup: 0 |
Pulldown: 0 | Intr:0
I (1806) wifi: wifi driver task: 3ffdb52c, prio:23, stack:3584, core=0
I (1806) system api: Base MAC address is not set, read default base MAC
address from BLKO of EFUSE
I (1806) system api: Base MAC address is not set, read default base MAC
address from BLK0 of EFUSE
I (1836) wifi: wifi firmware version: aeed694
I (1836) wifi: config NVS flash: enabled
I (1836) wifi: config nano formating: disabled
I (1836) wifi: Init dynamic tx buffer num: 32
I (1846) wifi: Init data frame dynamic rx buffer num: 32
I (1846) wifi: Init management frame dynamic rx buffer num: 32
I (1856) wifi: Init management short buffer num: 32
I (1856) wifi: Init static tx buffer num: 16
I (1866) wifi: Init static rx buffer size: 1600
I (1866) wifi: Init static rx buffer num: 10
I (1866) wifi: Init dynamic rx buffer num: 32
I (2716) phy: phy version: 4102, 2fa7a43, Jul 15 2019, 13:06:06, 0, 0
I (2716) wifi: mode : softAP (30:ae:a4:c3:00:4d)
I (2716) wifi: Total power save buffer number: 8
I (2716) wifi: Init max length of beacon: 752/752
I (2726) wifi: Init max length of beacon: 752/752
I (2726) wifi_utilities: WiFi AP Louie enabled
I (2726) sys: Buffer Allocation
```

```
I (2746) cam_task: Start task
I (2746) lep_task: Start task
I (2746) cmd_task: Start task
I (2746) gui_task: Start task
I (2746) adc_task: Start task
I (2746) app_task: Start task
I (2746) file_task: Start task
I (2746) file_task: Start task
I (2756) ili9341: ILI9341 initialization
I (2966) xpt2046: Touchpad initialization
I (2966) palettes: Loading Fusion color map
I (3046) file_task: SD Card found
I (3246) cmd_task: Socket created
I (3246) cmd_task: Socket bound
I (3246) cmd_task: Socket listening
E (4536) lep task: Could not get lepton image
```