# **SRAM Expansion**

## Back to patch list

## Patch data

Name	SRAM Expansion 1.1
Author	madsiur
Link	Download

## Rom data

ROM Name	Final Fantasy III (USA) 1.0
ROM SHA-1	4F37E4274AC3B2EA1BEDB08AA149D8FC5BB676E7
Header	No

#### Offsets

\$C0FFD8	Internal header SRAM size (from \$03 to \$05)
Bank \$C3	A few offsets related to saving and loading (see asm file)
\$EFFBC8-\$EFFC16	Extra code (see asm file)

# SRAM map

```
Slot 1 expansion:
                   $306A00-$307FFF
                   $306000-$3069FF = $7E1600-$7E1FFF
Slot 2 expansion:
                   $316A00-$317FFF
                   $316000-$3169FF = $7E1600-$7E1FFF
Slot 3 expansion:
                   $326A00-$327FFF
                   $326000-$3269FF = $7E1600-$7E1FFF
Other SRAM values: $336000-$3375FF (game common SRAM)
                   $337600-$337EFF (unused)
                   $337F00 = last altered savefile
                   $337F01 = rng index
                   $337F08 = checksum value #$E41B (slot 1)
                   $337F0A = checksum value #$E41B (slot 2)
                   $337F0C = checksum value #$E41B (slot 3)
                   $337F0E = checksum value #$E41B (slot 4, useless..)
```

# **Description**

This hack expand SRAM by \$1600 bytes for each save slot, allowing now 8Kb bytes for each save slot plus a third 8Kb for general purpose for a total of 32Kb of SRAM. In original game, only 8Kb of SRAM is used (\$306000-\$307FFF), each slot occupying \$0A00 bytes and \$200 bytes for general purpose at the

end of the 8Kb block.

With this hack, \$306000-\$307FFF is used for slot 1, \$316000-\$317FFF for slot 2 and \$326000-\$327FFF for slot 3. \$336000-\$337FFF is used for game SRAM. When you play the game, \$7E1600-\$7E1FFF is still used and copied to correct slot at saving. \$336000-\$3375FF is copied to correct slot as extra SRAM. At game loading, correct slot is loaded into \$336000-\$3375FF and \$7E1600-\$7E1FFF. So in order to save or load from extra SRAM in your hack, use as an example STA \$336000,X or LDA \$336000,X.

Since \$337600-\$337EFF is not used, it means it could be use as scratchpad SRAM for temporary things or have a general use common to the three slots. \$337FF0-\$337FFF has same function as the original \$307FF0-\$307FFF.

SRAM could be expanded more but I figured a whole \$2000 bytes instead of \$0A00 is enough expansion for any hack. In HiROM mapping banks \$20-\$3F can be used to map SRAM, using always the \$6000-\$7FFF range of the bank. \$C0FFD8 tell the emulator the SRAM size of the ROM.

I have not tested this on sd2snes, everdrive or real hardware. snes9x 1.55 and bsnes+ were used for testing. If you plan to use this hack and make a cart of your hack after, you will need a HiROM cart with a 32Kb memory chip. I have no idea if any existing SNES game has already 32Kb of SRAM.

## Links

Forum Thread

From:

https://www.ff6hacking.com/wiki/ - ff6hacking.com wiki

Permanent link:

https://www.ff6hacking.com/wiki/doku.php?id=ff3:ff3us:patches:madsiur:sran

Last update: 2019/02/12 11:45

