

Field RAM

This is a list of the RAM locations used by the field program (i.e. the main program that controls all non-world maps). The majority of the code that uses this data is in bank C0.

\$0000-\$00FF: Field Direct Page

```
+$00 Always #$0000
+$02 Always #$FFFF
+$04 Buttons Pressed this Frame (unmapped)
+$06 Buttons Pressed this Frame (mapped based on button config)
+$08 Buttons Pressed this Frame but not Last Frame
+$0A Buttons in Repeat Mode
+$0C Buttons Pressed Last Frame
    axlr----
    a: A button down
    x: X button down
    l: L button down
    r: R button down
    byetudlr
    b: B button down
    y: Y button down
    e: Select button down
    t: Start button down
    u: Up direction down
    d: Down direction down
    l: Left direction down
    r: Right direction down
$0E-$3F Scratchpad RAM
$40-$44 -
    $45 Frame Counter (gets incremented every NMI, never gets cleared)
    $46 VBlank Counter (gets incremented every NMI, can be cleared for frame
counting)
    $47 Event Counter (gets incremented every VBlank, never gets cleared)
+ $48 Pointer to Current Location in Object Animation Queue (+$10F7)
$4A i--ffff
    i: Fade In/Out Toggle (0 = fading out, 1 = fading in)
    f: Fade Speed
$4B icccccc
    i: Fixed Color In/Out Toggle (0 = fading out, 1 = fading in)
    c: Fixed Color Speed
$4C Current Screen Brightness (upper 4 bits active)
$4D Current Screen Fixed Color Intensity (upper 5 bits active, goes to
$2132)
$4E shbo4321 Current Color Add/Sub Designation (goes to $2131)
    s: enable color subtraction
    h: enable half color add/sub
    b: affect backdrop
```

```
    o: affect objects
    4: affect bg4
    3: affect bg3
    2: affect bg2
    1: affect bg1
    $4F Saved Color Add/Sub Designation (goes to $4E after color saturation
is complete)
    $50 ccmm--sd Color Addition Select (goes to $2130, always #$22)
    c: Clip colors to black before math (00 = Never, 01 = Outside Color
Window only, 10 = Inside Color Window only, 11 = Always)
    m: Prevent color math (00 = Never, 01 = Outside Color Window only,
10 = Inside Color Window only, 11 = Always)
    s: Add subscreen (instead of fixed color)
    d: Direct color mode for 256-color BGs
    $51 ---o4321 Main Screen Designation (goes to $212C)
    o: objects enabled in subscreen
    4: bg4 enabled
    3: bg3 enabled
    2: bg2 enabled
    1: bg1 enabled (always set for main screen)
    $52 ---o4321 Current Sub Screen Designation (goes to $212D)
    $53 Saved Sub Screen Designation (goes to $52 after color saturation is
complete)
    $54 bgriiiii Fixed Color Add/Sub Data
    b: affect blue
    g: affect green
    r: affect red
    t: target color intensity (5 bits, low 2 bits always set)
    $55 VBlank Disable (gets set every VBlank)
    $56 Battle Enable
    $57 Random Battles Enabled
    $58 Re-load the same map
    $59 Open Menu
    $5A -----321
    3: bg3 map needs to be flipped
    2: bg2 map needs to be flipped
    1: bg1 map needs to be flipped
+++ $5B tttttttt ttttpppp xxxxxxxx
    t: BG1 Horizontal Scroll Position (in tiles)
    p: BG1 Horizontal Scroll Position (in pixels)
    x: BG1 Horizontal Scroll Position (in pixels/256)
+++ $5F tttttttt ttttpppp xxxxxxxx
    t: BG1 Vertical Scroll Position (in tiles)
    p: BG1 Vertical Scroll Position (in pixels)
    x: BG1 Vertical Scroll Position (in pixels/256)
+++ $63 tttttttt ttttpppp xxxxxxxx
    t: BG2 Horizontal Scroll Position (in tiles)
    p: BG2 Horizontal Scroll Position (in pixels)
    x: BG2 Horizontal Scroll Position (in pixels/256)
```

```

+++ $67 tttttttt ttttpppp xxxxxxxx
      t: BG2 Vertical Scroll Position (in tiles)
      p: BG2 Vertical Scroll Position (in pixels)
      x: BG2 Vertical Scroll Position (in pixels/256)
+++ $6B tttttttt ttttpppp xxxxxxxx
      t: BG3 Horizontal Scroll Position (in tiles)
      p: BG3 Horizontal Scroll Position (in pixels)
      x: BG3 Horizontal Scroll Position (in pixels/256)
+++ $6F tttttttt ttttpppp xxxxxxxx
      t: BG3 Vertical Scroll Position (in tiles)
      p: BG3 Vertical Scroll Position (in pixels)
      x: BG3 Vertical Scroll Position (in pixels/256)
+ $73 Movement BG1 X Scroll Speed (in pixels/frame/256, signed)
+ $75 Movement BG1 Y Scroll Speed
+ $77 Movement BG2 X Scroll Speed
+ $79 Movement BG2 Y Scroll Speed
+ $7B Movement BG3 X Scroll Speed
+ $7D Movement BG3 Y Scroll Speed
+ $7F Obj Vertical offset for Shake Screen
$81 Set to zero and used to clear Sprite Graphics (fixed address DMA to
VRAM)
+ $82 Current Map Index
$84 Enable Map Load
$85 Enable Entrance Triggers
$86 BG1 Map Horizontal Clip ($0F, $1F, $3F, $7F, $FF)
$87 BG1 Map Vertical Clip
$88 BG2 Map Horizontal Clip
$89 BG2 Map Vertical Clip
$8A BG3 Map Horizontal Clip
$8B BG3 Map Vertical Clip
++ $8C Source of BG chunk change data
+ $8F XY Position of BG chunk to change
+ $91 Pointer to BG1 Map Data in VRAM (for vertical scrolling and full
updates)
+ $93 Pointer to BG1 Map Data in VRAM (for horizontal scrolling, first
column)
+ $95 Pointer to BG1 Map Data in VRAM (for horizontal scrolling, second
column)
+ $97 Pointer to BG2 Map Data in VRAM (for vertical scrolling and full
updates)
+ $99 Pointer to BG2 Map Data in VRAM (for horizontal scrolling, first
column)
+ $9B Pointer to BG2 Map Data in VRAM (for horizontal scrolling, second
column)
+ $9D Pointer to BG3 Map Data in VRAM (for vertical scrolling and full
updates)
+ $9F Pointer to BG3 Map Data in VRAM (for horizontal scrolling, first
column)
+ $A1 Pointer to BG3 Map Data in VRAM (for horizontal scrolling, second
column)

```

\$A3-\$B9 Tile Properties Stuff

```
-----
+----+----+----+ adjacent tiles (bg1 tile index)
| A3 | A4 | A5 |
+----+----+----+
| A6 | A7 | A8 |
+----+----+----+
| A9 | *AA* | AB | <-- object is at AA
+----+----+----+
| AC | AD | AE |
+----+----+----+
+ $AF Party's XY Position (in tiles)
$B1 -----lu Tile z-level passability (copied from $B8, never used)
$B2 -----lu Party z-level
    l: Lower Z Level
    u: Upper Z Level
$B3 movement direction (same as $087E)
+ $B4 pointer to party object data (+$0300, $00F8 for normal priority,
$01B8 for low priority)
+ $B6 Tile properties from user top tile (from $A7)
+ $B8 Tile properties from user bottom tile (from $AA)
    lrdbtslu tile properties byte 1 ($F7 = always impassable, $07 =
counter tile, can be talked over)
        l: Tile uses up/left movement (stairs)
        r: Tile uses up/right movement (stairs)
        d: Door Tile
        b: Bottom sprite shown above priority 1 bg (not active for
bridge tiles, ZoneDoctor: "0.4")
        t: Top sprite shown above priority 1 bg (not active for
bridge tiles, ZoneDoctor: "0.3")
        s: Bridge tile (ZoneDoctor: "solid tile, cannot be walked
on")
        l: Passable on lower z-level (ZoneDoctor: "Solid to tier
2", if both of these are set, this tile can be a transition between upper
and lower)
        u: Passable on upper z-level (ZoneDoctor: "Solid to tier
1")
    nu--btrl tile properties byte 2
        n: NPC can randomly move here (ZoneDoctor: "Passable
quadrants")
        u: Always Face Up (ladder)
        -: (ZoneDoctor: "1.5")
        -: (ZoneDoctor: "1.4")
        b: Passable through bottom
        t: Passable through top
        r: Passable through right
        l: Passable through left
```

\$BA-\$BC Dialog Window

```

-----
$BA Enable Dialog Window ($01 = open, $80 = close)
$BB Dialog Window Size ($00: smallest, $05: fully open)
$BC Dialog Window Top Y Position ($01: top, $12: bottom)

$BD-$D3 Dialog Text
-----
$BD Current Dialog Character
$BE Next Dialog Character
$BF Text's Current X Position on Dialog Window ($04-$E0)
$C0 Width of Current Word
+ $C1 Pointer to Next Tile in VRAM (+$3800)
+ $C3 Pointer to Current Tile in VRAM (+$3800)
$C5 Text Graphics Needs to be Copied to VRAM
+ $C6 Unused (set to #$0700)
$C8 Max X Position on Dialog Window (always $E0?)
++ $C9 Pointer to Current Dialog Character
$CC current region of dialog window that needs to be cleared in VRAM
(starts at 9, decrements once per frame)
9 = none, waiting for keypress
+-----+-----+
|      8      |      7      |
+-----+-----+
|      6      |      5      |
+-----+-----+
|      4      |      3      |
+-----+-----+
|      2      |      1      |
+-----+-----+
0 = none, no text displayed (or map name displayed)
+ $CD Character to Display (top byte is for extra characters from FF6j)
$CF eppppppp
    e: text buffer is empty
    p: dialog text buffer position (+$7E9183)
+ $D0 Dialog Index
$D2 -
$D3 Keypress State (decrements when button is pressed or released)
    0 = not waiting for keypress
    1 = waiting for keypress
    2 = waiting for key release

$D4-$DE Object Stuff
-----
+ $D4 pointer to sprite data at $0340 & $0400 (normal priority)
+ $D6 pointer to sprite data at $0300 & $0320 (high priority)
+ $D8 pointer to sprite data at $04C0 & $04E0 (low priority)
+ $DA Pointer to Current Object Data (+$0867)
$DC Current Object (x2)
$DD Total Number of Active Objects (x2)
$DE Number of Objects Left

```

\$DF-\$EF Event Stuff

```
-----  
$DF BG fixed color math begin (x2)  
$E0 BG fixed color math end (x2)  
$E1 ofs-----  
    o: waiting for an object script to finish  
    f: waiting for fade to finish  
    s: waiting for scroll to finish  
$E2 Object to Wait for  
+ $E3 Event Pause Counter (frames)  
++ $E5 Event PC  
+ $E8 Event Stack Pointer  
$EA Event Op Code  
$EB-$EF Event Code Data (up to 5)
```

\$F3-\$FF Decompression Stuff

```
-----  
++ $F3 Decompression Source  
++ $F6 Decompression Destination  
+ $F9 (used by decompression subroutine)  
$FB (used by decompression subroutine)  
+ $FC Decompression Size Counter  
$FE (used by decompression subroutine)  
$FF (used by decompression subroutine)
```

\$0100-\$01FF: Battle RAM

See [Battle RAM](#).

\$0200-\$02FF: Menu RAM

See [Menu RAM](#).

\$0300-\$051F: Sprite Data

This data gets copied directly to the SNES OAM data every frame.

Format for sprites:

```
$00 x position  
$01 y position  
+ $02 vhoopppm mmmmmmmm  
    v: vertical flip  
    h: horizontal flip  
    o: layer priority  
    p: palette index
```

m: graphic index

\$0300-\$033F High priority sprites

\$0300 object, top (8)
 \$030C timer minute tens digit
 \$0310 timer minute ones digit
 \$0314 timer second tens digit
 \$0318 timer second ones digit
 \$031C timer colon
 \$0320 object, bottom (8)

\$0340-\$047F Normal priority sprites

\$0340 object, top (40)
 \$03E0 overlay (4)
 \$03F0 unused (2)
 \$03F8 party, top
 \$03FC party, bottom
 \$0400 object, bottom (40)

\$04A0-\$04FF Low priority sprites

\$04A0 overlay (4)
 \$04B0 unused (2)
 \$04B8 party, top
 \$04BC party, bottom
 \$04C0 object, top sprites (8)
 \$04E0 object, bottom sprites (8)

\$0500-\$051F sxsxsxsx sprite high data (2 bits per sprite)

s: large sprite flag (32x32)
 x: x position MSB

\$0520-\$119F: Field RAM

\$0520-\$0540 Map Properties

 \$0520 Name Index
 \$0521 t-s123wx
 t: load timer graphics (overwrites some chocobo graphics)
 s: enable spotlights
 1: wavy BG1
 2: wavy BG2
 3: wavy BG3
 w: enable Warp (spell and item)
 x: enable X-Zone (doesn't do anything)
 \$0522 3bbbbbbb
 3: BG3 foreground (sets the priority bits for all bg3 tiles, doesn't affect \$2105)
 b: battle background index
 \$0523 -----
 \$0524 Tile Properties Index

```
$0525 b-----  
      b: enable random battles  
$0526 ?-----mm  
      ?: set for colosseum guy's house exterior (unused)  
      m: Window Mask Settings (used if flashlight, spotlight, or  
pyramid is enabled)  
+++++ $0527 aaaaaaab bbbbbbcc ccccdddd dddeeeee eeffffff fggggggg  
      a: BG2 Tile Formation Index ($800 bytes -> $7FC800)  
      b: BG1 Tile Formation Index ($800 bytes -> $7FC000)  
      c: BG3 Graphics Index ($1000 bytes -> VRAM $3000)  
      d: BG1/BG2 Tilesheet 4 ($1000 bytes -> VRAM $2000) doesn't get  
copied if tilesheet 3 = tilesheet 4  
      e: BG1/BG2 Tilesheet 3 ($1000 bytes -> VRAM $1800) $2000 bytes if  
tilesheet 3 = tilesheet 4  
      f: BG1/BG2 Tilesheet 2 ($1000 bytes -> VRAM $1000)  
      g: BG1/BG2 Tilesheet 1 ($2000 bytes -> VRAM $0000)  
+++ $052D --cccccc ccccbbbb bbbbbbbaa aaaaaaaaa  
      c: BG3 Map Data Index ($4000 bytes -> $7F8000)  
      b: BG2 Map Data Index ($4000 bytes -> $7F4000)  
      a: BG1 Map Data Index ($4000 bytes -> $7F0000)  
$0531 Sprite Overlay Index  
$0532 BG2 Horizontal Shift (positive values shift left, +/-)  
$0533 BG2 Vertical Shift (positive values shift up, +/-)  
$0534 BG3 Horizontal Shift  
$0535 BG3 Vertical Shift  
$0536 BG2/BG3 Scroll Mode  
$0537 aabbccdd  
      a: BG1 Map Width Index  
      b: BG1 Map Height Index  
      c: BG2 Map Width Index  
      d: BG2 Map Height Index  
$0538 aabb-def  
      a: BG3 Map Width Index  
      b: BG3 Map Height Index  
      d: <unused> (copied to $0592)  
      e: <unused> (copied to $0592)  
      f: <unused> (copied to $0591)  
$0539 Palette Index  
$053A Palette Animation Index  
$053B aaabbbbb  
      a: BG3 Animation Index ($1000 bytes -> VRAM $3000)  
      b: BG1/BG2 Animation Index ($800 bytes -> VRAM $2800)  
$053C Song Index  
$053D -  
$053E Map Width ($00 for loop)  
$053F Map Height  
$0540 BG2/BG3 Color Math Mode  
$0541 BG1 X Center Coordinate (on screen, 16x16 tiles)  
$0542 BG1 Y Center Coordinate
```



```

$0543 BG2 X Center Coordinate
$0544 BG2 Y Center Coordinate
$0545 BG3 X Center Coordinate
$0546 BG3 Y Center Coordinate
+ $0547 Event BG1 Horizontal Scroll Speed ($0080 = 1 pixel/frame, +/-)
+ $0549 Event BG1 Vertical Scroll Speed
+ $054B Event BG2 Horizontal Scroll Speed
+ $054D Event BG2 Vertical Scroll Speed
+ $054F Event BG3 Horizontal Scroll Speed
+ $0551 Event BG3 Vertical Scroll Speed
$0553 BG2 Horizontal Scroll Rate Multiplier (bg2 pixels/step)
$0554 BG2 Vertical Scroll Rate Multiplier (bg2 pixels/step)
$0555 BG3 Horizontal Scroll Rate Multiplier (bg3 pixels/step)
$0556 BG3 Vertical Scroll Rate Multiplier (bg3 pixels/step)
$0557 BG1 destination X center coordinate (when scrolling to a party
after an object collision)
$0558 BG1 destination Y center coordinate
$0559 lock screen (Disable Screen Scroll With Character Movement)
$055A BG1 Map Data Update Status (decrements every frame)
    05 = needs update, but waiting for event command $75
    04 = top->RAM
    03 = bottom->RAM
    02 = top->VRAM
    01 = bottom->VRAM
    00 = no changes
$055B BG2 Map Data Update Status
$055C BG3 Map Data Update Status
$055D Default party
$055E Object Collision Status
    00 = no collisions
    01 = collision occurred, waiting for party to stop moving
    02 = collision being processed
$055F Object Collision Facing Direction
+ $0560 Pointer to Character Object Data for Collision
+ $0562 Pointer to NPC Object Data for Collision

$0564-$0584 Dialog Window Stuff
-----
$0564 Show Text Only (no dialog window)
$0565 Wallpaper Index
$0566 Window 2 Frame Counter (for flashlight/pyramid/spotlights)
$0567 Counter for map name dialog box (counts down from 100 every
frame)
$0568 e-----d Dialog Flags
    e: dialog item is fully rendered
    d: enable dialog text
+ $0569 counter for dialog pause
+ $056B kccccccc cccccccc
    k: allow keypress
    c: counter for keypress
$056D Multiple Choice Selection is Changing

```

```
$056E Current Multiple Choice Selection
$056F Maximum Multiple Choice Selection
$0570-$057F Multiple Choice XY Positions (8 items, 2 bytes each)
+ $0580 Current Multiple Choice Position (+$3800 in VRAM)
$0582 Update Dialog Text (for multiple choice indicator movement)
$0583 Item Index for Dialog Window Display
$0584 Spell Index for Dialog Window Display (unused, this is from
FF6j)

$0585 BG1 Vertical Scroll Status
    0 = no update
    1 = update in RAM
    2 = update in VRAM
$0586 BG1 Horizontal Scroll Status
$0587 BG2 Vertical Scroll Status
$0588 BG2 Horizontal Scroll Status
$0589 BG3 Vertical Scroll Status
$058A BG3 Horizontal Scroll Status
+ $058B BG1 VRAM Map Location ($4800 or $4C00)
+ $058D BG2 VRAM Map Location ($5000 or $5400)
+ $058F BG3 VRAM Map Location ($5800 or $5C00)
$0591 -
$0592 -
$0593 -
$0594-$05C3 Event Stack for subroutines (up to 15 events)
$05C4-$05F3 Event Loop Count (3 bytes each)
$05F4-$0623 Event Stack for loops (up to 16 loops)

$0624-$062B Event Code for Map Startup
-----
+++ $0624 B2 xxxxxx Jump to xxxxxx
+ $0628 D3 CF      Clear event bit $1EB9.7 (enable user control of
character)
$062A FD          Add 1 to event PC (does nothing)
$062B FE          Return

$062C Minimum X Scroll Position (in pixels, $FF means no min or max)
$062D Maximum X Scroll Position (in pixels)
$062E Minimum Y Scroll Position (in pixels, $FF means no min or max)
$062F Maximum Y Scroll Position (in pixels)
$0630 Horizontal Scanline Position
$0631 Vertical Scanline Position
$0632 Max Vertical Scanline Position (can be used to watch CPU load)
$0633-$0742 Sprite Overlay Stuff
-----
$0633-$0642 Sprite Overlay Graphics Indexes (16 tiles)
$0643-$0742 yxo-ooo- Sprite Overlay Tile Formation (for each bg1 tile, $FF
means no overlay tile)
        y: flip overlay graphics vertical
```

```

        x: flip overlay graphics horizontal
        o: overlay tile index
$0743 x-----dd
        x: don't update facing direction (for party switch)
        d: party facing direction
$0744 -----lu Saved/Destination Z Level
        l: Lower Z Level
        u: Upper Z Level
$0745 Enable Map Name Dialog Box
$0746-$0749 -
$074A o321ffaa
        o: shake obj layer
        3: shake BG3
        2: shake BG2
        1: shake BG1
        f: frequency
        a: amplitude
$074B current shake screen amplitude
+ $074C BG1 vertical offset for shake screen
+ $074E BG2 vertical offset for shake screen
+ $0750 BG3 vertical offset for shake screen
$0752 ??? Spotlight color add/sub (unused)
$0753 ??? Spotlight color add/sub (unused)
$0754-$075B Decimal Number for Dialog Text Display
+ $075C ??? Pyramid
+ $075E ??? Pyramid
+ $0760 ??? Pyramid
$0762 Enable Party Change

$0763-$077A Active Overlay Data (6 items, 4 bytes each, last two are unused)
-----
$0763 Overlay Tile X Position
$0764 Overlay Tile Y Position
$0765 Overlay Tile Graphic Index ($00 = no tile)
$0766 vh-----f
        v: vertical flip
        h: horizontal flip
        f: 1 = upper z-level, 0 = lower z-level

$077B f--sssss
        f: enable flashlight
        s: flashlight radius in pixels * 2 (target)
$077C --ssssss
        s: flashlight radius in pixels (current)
+ $077D Pyramid/Flashlight XY Position
+ $077F Pointer to Pyramid Object Data (+0867)
$0781 Enable Pyramid
$0782 -
+ $0783 ??? (spotlights)
+ $0785 ??? (spotlights)
$0787 -

```

```
$0788 -
$0789 "Monster-in-a-Box" Formation Index
$078A bs-----
      b: disable battle blur
      s: disable sound effect
$078B Number of Random Battles on Map
+ $078C Number of Steps On Map For Random Battles
$078E Party is on a trigger (disables random battles)
$078F Number of active NPCs
$0790-$0794 Pyramid/Spotlights data
$0795 Character Portrait Index
+ $0796 Screen Mosaic Counter
$0798 Wait for character objects to get updated
$0799-$07FA Pointers to Object Data (multiples of $29, 2 bytes each)
$07FB-$0866 Pointers to Active Objects
+ $07FB Party Character 0
+ $07FD Party Character 1
+ $07FF Party Character 2
+ $0801 Party Character 3
+ $0803 Showing Character
$0867-$1068 Object Data (50 items, 41 bytes each, $00-$0F are characters,
$10-$2F are NPC's, $30 is camera ($07B0), $31 is showing character or for
unused objects ($07D9))
-----
$0867 verbbppp Object Settings
      v: Visible
      e: Enabled (active)
      r: Battle Row (back row if set) \
      b: Battle Order                  |--> characters only, though
$1850 is "master" data
      p: Party                        /
$0868 vvvddoom Sprite Settings
      v: Vehicle Index (or animation speed for special graphics, which
is unusable)
          000 = character only, no vehicle
          001 = chocobo, character not shown
          010 = magitek, character not shown
          011 = raft, character not shown
          100 = special NPC graphics (ZoneDoctor: "4.7")
          101 = chocobo, character shown
          110 = magitek, character not shown
          111 = raft, character not shown
      d: saved facing direction for movement (while object is
activated)
      o: layer priority (for layering wrt bg tiles, ZoneDoctor: "Can
walk under/over")
          00 = default, based on bg tile properties
          01 = upper sprite above bg, lower sprite below bg
          02 = both sprites above bg
```

```

    03 = both sprites below bg
    m: Enable Walking Animation When Moving *OR* horizontal flip for
special NPC graphics (copied from $0889.7)
++ $0869 tttttttt ttttpppp xxxxxxxx
    t: X Position (in tiles)
    p: X Position (in pixels)
    x: X Position (in pixels/4096)
++ $086C tttttttt ttttpppp yyyyyyyy
    t: Y Position (in tiles)
    p: Y Position (in pixels)
    y: Y Position (in pixels/4096)
+ $086F Y Shift for jumping (in pixels, high byte always 0)
+ $0871 Horizontal Movement Speed
+ $0873 Vertical Movement Speed
$0875 Object Speed
$0876 -hpppppp Current Graphic Position
    h: horizontal flip
    p: graphics position
$0877 -hpppppp Next Graphic Position
    h: horizontal flip
    p: graphics position
$0878 Actor Index
$0879 Graphic Index
+ $087A Pointer to Location in Map Data (+$7E2000 or +$7F0000)
$087C 2cxpmmmm Movement Type
    2: object scrolls with BG2 rather than BG1 (ZoneDoctor:
"Solidify action path")
    c: object event activates on collision
    x: don't face target when activated *OR* 32x32 sprite size for
special NPC graphics (ZoneDoctor: "No face on trigger")
    p: passability flag (0 = passable, 1 = not passable)
    m: object movement type
        0 = none
        1 = script-controlled
        2 = user-controlled
        3 = random
        4 = activated (facing something)
$087D saved copy of $087C (during event execution)
$087E ---ddddd
    d: moving direction
        $00 = not moving
        $01 = up
        $02 = right
        $03 = down
        $04 = left
        $05 = up/right
        $06 = down/right
        $07 = down/left
        $08 = up/left
        $09 = right/up 1x2
        $0A = right/up 2x1

```

```
    $0B = right/down 2x1
    $0C = right/down 1x2
    $0D = left/down 1x2
    $0E = left/down 2x1
    $0F = left/up 2x1
    $10 = left/up 1x2
$087F -----dd
    d: facing direction
        00 = up
        01 = right
        10 = down
        11 = left
$0880 vhooppp- (upper sprite)
$0881 vhooppp- (lower sprite)
    v: Vertical Flip
    h: Horizontal Flip
    o: sprite layer priority (always 2 or 3)
    p: Palette Index
$0882 Object script wait counter
++ $0883 Object script pointer
$0886 Number of Steps to Take
$0887 jjpppppp
    j: Jump Type (00 = low, 01 = high)
    p: Jump Counter (pointer to $C059AD, decrements every frame)
$0888 -----blu (copied from tile properties)
    b: bridge tile
    l: lower Z level
    u: upper Z level
++ $0889 Pointer to Event Script (normal objects only)
$0889 hvvvvvvv (special NPC graphics only)
    h: horizontal flip
    v: VRAM address (in tiles, +$7000)
$088A sssmmmmm (special NPC graphics only)
    s: amount to shift (in pixels * 2 if there is no master object,
in tiles if there is)
    m: master object number (NPC number)
$088B -----md (special NPC graphics only)
    m: enable master/slave object (this object follows another NPC
whenever it moves)
    d: direction to shift (0 = right, 1 = down)
$088C ppannggg
    p: sprite priority (layering wrt other sprites, 0 = normal, 1 =
high, 2,3 = low) (ZoneDoctor: "8.3", "8.4")
    a: enable special animation (set when g is not zero)
    n: special animation frame type (active when g is not zero)
        00 = 1 frame
        01 = 2 frames (one image flips horizontally)
        10 = 2 frames
        11 = 4 frames
```

g: special animation offset (see C0/5831) (ZoneDoctor: "8.5", "8.6", "8.7")

+ \$088D Object Map Index

\$088F Pointer to Animation Queue (+\$10F7)

\$1069-\$10D0 BG1/BG2 Animation Data (8 items, 13 bytes each)

+ \$1069 Animation Counter

+ \$106B Animation Speed (\$0400 = 1:1 @ 60Hz)

\$106D Graphic Bank Pointer

+ \$106E Frame 1 Pointer

+ \$1070 Frame 2 Pointer

+ \$1072 Frame 3 Pointer

+ \$1074 Frame 4 Pointer

\$10D1-\$10E6 BG3 Animation Data

+ \$10D1 Animation Counter

+ \$10D3 Animation Speed

+ \$10D5 Size

+ \$10D7 Frame 1 Pointer

+ \$10D9 Frame 2 Pointer

+ \$10DB Frame 3 Pointer

+ \$10DD Frame 4 Pointer

+ \$10DF Frame 5 Pointer

+ \$10E1 Frame 6 Pointer

+ \$10E3 Frame 7 Pointer

+ \$10E5 Frame 8 Pointer

\$10E7-\$10F6 Palette Animation Data (2 items, 8 bytes each)

\$10E7 counter 1 (frames per palette update)

\$10E8 counter 1 reset value [byte 1]

\$10E9 counter 2 (palette updates per reset)

\$10EA ttttrrrr [byte 0]

t: palette animation type (0 = none, 1 = cycle, 2 = ROM, 3 = subtract pulse)

r: counter 2 reset value

\$10EB first color pointer (color index * 2) [byte 2]

\$10EC (number of affected colors - 1) * 2 (-1 only for type 2 and 3) [byte 3]

\$10ED color index in ROM (only used by type 2 [byte 4])

\$10EE unused [byte 5]

\$10F7-\$1126 Object Animation Data (24 items, 2 bytes each)

+ \$10F7 pointer to object data, \$07B0 if a slot is empty, only 6 get updated per frame

+ \$1127 Open Door Count (x2)

\$1129-\$1158 Open Door XY positions

```
+ $1159 - (debug mode ???)
+ $115B Event Bits Being Displayed (debug mode)
$115C-$1187 -

$1188-$119F Timer Data (4 items, 6 bytes each)
-----
$1188 pfrm----
      p: Pause timer in menu and battle.
      f: Timer is visible on field (timer 0 only).
      r: End battle or exit menu if timer runs out.
      m: Timer is visible in menu and battle (timer 0 only).
+ $1189 counter (frames)
++ $118B pointer to event code (+CA0000)
```

\$11A0-\$11FF: Shared RAM

Shared between Field, [Battle](#), and [World](#) programs.

```
$11A0-$11E0 Character Stats ($40 bytes, shared with bank $C2)
-----
+$11A0 Mag. Power
+$11A2 Stamina
+$11A4 Speed
+$11A6 Vigor
+$11A8 Evade
+$11AA MBlock
$11AC Battle Power (main hand)
$11AD Battle Power (off-hand)
$11AE Weapon Hit Rate (main hand)
$11AF Weapon Hit Rate (off-hand)
$11B0 Weapon Element (main hand)
$11B1 Weapon Element (off-hand)
+$11B2 bbhhhhhh hhhhhhhh
      b: hp boost (0 = none, 1 = 25% boost, 2 = 50% boost, 3 = 12.5%
boost)
      h: max hp
$11B4 Weapon Spell Cast
$11B5 -
$11B6 Absorbed Elements
$11B7 Nullified Elements
$11B8 Weak Elements
$11B9 Halved Elements
$11BA Defense
$11BB Magic Defense
$11BC Status 2 Effects
$11BD -
$11BE ----mpbb
      m: can block magic attacks
```



```

        p: can block physical attacks
        b: block graphic (0 = Dagger, 1 = Sword, 2 = Shield, 3 = Zephyr
Cape)
$11BF-$11C5 -
    $11C6 Weapon
    $11C7 Shield
    $11C8 Helmet
    $11C9 Armor
    $11CA Relic 1
    $11CB Relic 2
    $11CC -
    $11CD -
    $11CE ---4321-
        1: weapon in off-hand
        2: weapon in main hand
        3: unarmed in off-hand
        4: unarmed in main hand
    $11CF ---4----
        4: weapons in both hands. will oddly clear Genji Glove effect
in $11D8, for damage purposes.
    $11D0 ----zhds Physical Block Graphic
    $11D1 ----zhds Magical Block Graphic
        z: zephyr Cape
        h: shield
        s: sword
        d: dagger
    $11D2 Status 1 Immunity
    $11D3 Status 2 Immunity
    $11D4 Status 3 Effects
    $11D5 76543210
        7: MP +12.5% (bard's hat)
        6: MP +50% (crystal orb)
        5: MP +25% (minerva)
        4: HP +12.5% (green beret)
        3: HP +50% (muscle belt)
        2: HP +25% (red cap)
        1: raise magic damage (double earrings or hero ring)
        0: raise fight damage (atlas armlet, hero ring)
    $11D6 76543210
        7: jump continuously (dragon horn)
        6: steal -> capture (thief glove)
        5: slot -> gp rain (coin toss)
        4: sketch -> control (fakemustache)
        3: magic -> x-magic (gem box)
        2: fight -> jump (dragoonboots)
        1: prevent back/pincer attacks (back guard)
        0: increase pre-emptive attack rate (gale hairpin)
    $11D7 76543210
        7: raise vigor +50% (hyper wrist)
        6: MP cost = 1 (economizer)
        5: MP cost = 50% (gold hairpin)

```

```
    4: 100% Hit Rate, ignore target's MBlock (sniper sight)
    3: Increase Control Rate (coronet)
    2: Increase Sketch Rate (beret)
    1: raise magic damage (single earring or hero ring)
    0: Increase Steal Rate (sneak ring)
$11D8 -thgaebo
    t: protects weak allies (true knight)
    h: can equip heavy items (merit award)
    g: can equip 2 weapons (genji glove)
    a: uses weapon 2-handed (gauntlet)
    e: randomly evade (beads)
    b: randomly counter (black belt)
    o: fight -> x-fight (offering)
$11D9 7--43210
    7: make character undead (relic ring)
    4: double GP (cat hood)
    3: double experience (exp. egg)
    2: casts wall when HP is low
    1: casts safe when HP is low (mithril glove, czarina ring)
    0: casts shell when HP is low (barrier ring, czarina ring)
$11DA 765---1- Weapon Effects (main hand)
$11DB 765---1- Weapon Effects (off-hand)
    7: enable runic
    6: 2-hand
    5: no back row penalty
    1: swdtech
$11DC Run Factor
$11DD -
$11DE -
$11DF t-s---mc Field Equipment Effects
    t: tintina bar effect (doesn't work)
    s: sprint shoes effect (1.5x walk speed)
    m: moogle charm effect (no random battles)
    c: charm bangle effect (50% less random battles)
+ $11E0 r-----bb bbbbbbbb
    r: randomly pick this battle or one of the next 3 (see C2/30E8)
    b: battle index
+ $11E2 ???????? ??bbbbbb
    b: battle background index
$11E4 ----3210
    3: continue current music (no battle music)
    2: on the veldt (enable leap in status menu)
    1: on the veldt (enable leap in battle)
    0: gau can appear after battle
$11E5-$11EF -
$11F0 Screen Mosaic Speed
$11F1 Enable Restore Saved Game
$11F2 (shared with bank $EE)
$11F3 (shared with bank $EE)
```

```
+ $11F4 (shared with bank $EE)
+ $11F6 (shared with bank $EE)
$11F8 (shared with bank $EE)
$11F9 World Map Battle BG index (table at C0/C27F)
    0: field (WoB)
    1: forest (WoR)
    2: desert (WoB or WoR)
    3: forest (WoB)
    4: building/field (WoB/WoR)
    5: field (WoR)
    6: the veldt
    7: falling through the clouds
$11FA efs---vv Map Startup Flags
    e: enable map startup event
    f: disable map fade in when loading
    s: don't update map size when loading map
    v: world map vehicle
        0 = no vehicle
        1 = airship
        2 = chocobo
$11FB Showing Character's Graphic Index
$11FC Showing Character's Palette Index
++ $11FD World Map Event Pointer
```

\$1200-\$12FF: Copy of Direct Page

The field direct page (\$0000-\$00FF) gets copied here during battle and when on the world world map.

\$1300-\$14FF: Sound/Music RAM

See [Sound/Music RAM](#).

\$1500-\$15FF: Interrupt Code and CPU Stack

```
$1500-$1503 NMI Jump Code
$1504-$1507 IRQ Jump Code
$1508-$15FF CPU Stack
```

\$1600-\$1FFF: Save RAM

This data (0x0A00 bytes) is saved to SRAM when the game is saved. Also see [SRAM](#).

```
$1600-$184F Character Data (16 items, 37 bytes each)
    $1600 Actor Index
    $1601 Graphic Index
    $1602-$1607 Name
```

```
$1608 Level
+ $1609 Current HP
+ $160B bbbhhhhh hhhhhhhh
      b: hp boost (0 = none, 1 = 25% boost, 2 = 50% boost, 3 = 12.5%
boost)
      h: max hp
+ $160D Current MP
+ $160F bbbmmmmm mmmmmmmm
      b: mp boost (0 = none, 1 = 25% boost, 2 = 50% boost, 3 = 12.5%
boost)
      h: max mp
++ $1611 Experience Points
$1614 weicmpzd Status 1
      w: wound
      e: petrify
      i: imp
      c: clear
      m: magitek
      p: poison
      z: zombie
      d: dark
$1615 fihcmlzr Status 4
      f: float
      i: interceptor
      h: hide      (unused)
      c: control  (unused)
      m: morph    (unused)
      l: life 3   (unused)
      z: freeze   (unused)
      r: rage     (unused)
$1616-$1619 Battle Commands
$161A Vigor
$161B Speed
$161C Stamina
$161D Mag. Power
$161E Esper
$161F Weapon
$1620 Shield
$1621 Helmet
$1622 Armor
+ $1623 Relics
$1850-$185F verbbppp
      v: Visible
      e: Character is Enabled
      r: Battle Row (back row if set)
      b: Battle Order
      p: Party
++ $1860 Current GP
++ $1863 Current Game Time
```

```
++ $1866 Current Steps
$1869-$1968 Current Items
$1969-$1A68 Item Quantities
+++ $1A69 Current Espers
    $1A6D Current Party

$1A6E-$1D4C Character Skill Data
-----
$1A6E-$1CF4 Spells Known (12 characters, 54 spells each, 1 byte per spell)
    $1CF6 Morph Counter
    $1CF7 Known sword techs
$1CF8-$1D27 Sword tech names (from FF6j)
    $1D28 Known blitzes
$1D29-$1D2B Known lores
$1D2C-$1D4B Known rages
    $1D4C Known dances

$1D4D-$1DC8 Config Data
-----
    $1D4D cmmmwbbb
        c: command set (window/short)
        m: message speed
        w: battle mode (active/wait)
        b: battle speed
    $1D4E gcsrwww
        g: gauge
        c: cursor
        s: sound
        r: reequip
        w: wallpaper (values 0-7 valid)
    $1D4F ----4321
        4: player 2 control character 4
        3: player 2 control character 3
        2: player 2 control character 2
        1: player 2 control character 1
    $1D50 aaaabbbb
        a: A button mapping (0 = start, 1 = A, 2 = B, 3 = X, 4 = Y, 5 =
top L, 6 = top R, 7 = select)
        b: B button mapping
    $1D51 xxxxyyyy
        x: X button mapping
        y: Y button mapping
    $1D52 llllrrrr
        l: top L button mapping
        r: top R button mapping
    $1D53 tttteeee
        t: Start button mapping
        e: Select button mapping
    $1D54 mbccccss
        m: controller 2 enabled
        b: custom button config
```

```
    c: font/window palette color selection
    s: spell order index
+ $1D55 Font Color
$1D57-$1DC6 Window Palette (8 palettes, 7 colors each)
+ $1DC7 Number of times the game has been saved

$1DC9-$1DDC Battle Variables
-----
$1DC9 -
$1DCA -
$1DCB -
$1DCC -
$1DCD -
$1DCE -
$1DCF abcdefgh
    a: if set, program compares current monster index with
        monster index at CF3780,X. if equal, monster index
        is changed to monster index at CF3782,X.
    b-h: same as a
$1DD0 ----mtf
    m: permanent morph (for Phunbaba battle)
    t: morph lasts twice as long (set after Phunbaba battle)
    f: magic only (fanatic's tower)
$1DD1 ztrbemsg Battle End Event Flags
    z: zone eater engulfed the party
    t: timers are shown in menu and battle
    r: ran out of time (before emperor's banquet)
    b: ran away from previous battle
    e: gained AP is displayed (espers have been acquired)
    m: morph is available
    s: enables scene with LOCKE and EDGAR if TERRA uses magic
    g: game over after battle ends
$1DD2 --ums-gd
    u: LOCKE is wearing soldier uniform
    m: LOCKE is wearing merchant clothes
    s: SHADOW won't leave after battle
    g: GAU has been obtained
    d: Doom Gaze has been defeated
+ $1DD3 Doom Gaze's HP
$1DD5 Battles Fought with Cursed Shield
$1DD6 -
$1DD7 -
$1DD8 -
$1DD9 -
$1DDA -
$1ddb -
$1DDC -
$1DDD-$1E1C Veldt Formations Available (64 bytes)
$1E1D-$1E3F -
```

\$1E40-\$1E7F Treasure Bits (indicates if chests have been collected)

\$1E80-\$1F5F Event Bits

\$1E80 1: first dialog with Arvis

3: moogles battle at Narshe

4: met Edgar

5: learned about Sabin

6: first dialog with Kefka at Figaro castle

7: Sabin returned to Figaro castle

\$1E81 0: going to room at Figaro after first dialog with Kefka

3: met Shadow

\$1E82 0: Sabin joined

\$1E84 4: Shadow's 1st dream

6: Shadow's 2nd dream

7: Shadow's 3rd dream

\$1E85 0: Shadow's 4th dream

\$1E93 ?f??????

f: floating island has lifted off (not shown on mini map)

\$1EA5 76543210

0: single dog attack, opening Narshe

1: two guards attack, opening Narshe

2: two dogs then two guards attack, opening Narshe

3: dialog at mine entrance, opening Narshe

4: gate open, opening Narshe

\$1EA6 76543210

0: pincer attack, opening Narshe

1: two guards + two mammoths attack, opening Narshe

3: save point explanation

4: chocobo explanation

5: wheel attack, opening Narshe

+ \$1EB4 abcdefgh ijklmnop

a: TERRA is available

\$1EB6 sotaldru

s: serpent trench arrow direction (0: right, 1: left)

o: map's object data needs to be loaded ???

t: tile event bit (gets cleared when the party moves to a new

tile)

a: A button is down

l: character is facing left

d: character is facing down

r: character is facing right

u: character is facing up

\$1EB7 sg??va?m

s: on a save point

g: not enough gp (set by event command \$85)

v: on the veldt

a: airship is grounded

```

    m: play alternative world map music
$1EB8 ?p???ms?
    p: enable character portrait
    m: disable main menu
    s: sprint shoes effect is disabled
$1EB9 upes????
    u: user does not have control of character
    p: enable party switching
    e: encounters disabled
    s: don't change song when loading map
++ $1EBA current rare items
$1EBD sc--rrrr
    s: fighting SHADOW at the colosseum
    c: a valid item was selected for the colosseum
    r: more rare items (unused)
$1EBE -
$1EBF -
$1ED7 ???m????
    m: continue current music during battle -> $11E4.3
$1ED8 aaaa???f
    a: party 1 event bits (cleared every step)
    f: enable horizontal fade bars from ending
$1ED9 ccccbbbb
    c: party 3 event bits (cleared every step)
    b: party 2 event bits (cleared every step)

+$1EDC ??cccccc cccccccc
    c: initialized characters
+$1EDE sncccccc cccccccc
    s: there is at least one saved game (go to load screen after
title screen instead of playing intro)
    n: go to first Narshe scene after magitek march (instead of back
to the title screen)
    c: available characters
$1EE0-$1F5F NPC Event Bits (to enable/disable NPC's, initialized for new
game, all other event bits are cleared)

$1F60-$1FFF
-----
+ $1F60 World XY Position
+ $1F62 Airship XY Position
+ $1F64 --ddnzpm mmmmmmmm Current Map Index
    d: facing direction
    n: show map name
    z: z-level
    p: set destination as parent map
    m: map number
+ $1F66 Field XY Scroll Position (BG1)
$1F68 Facing Direction (parent facing direction if bit 7 set)
```



```

+ $1F69 Parent Map
+ $1F6B Parent XY Position
  $1F6D Random Number (RNG Seed for NPC walking direction.)
+ $1F6E Danger counter for random battles
$1F70-$1F7F Saved Character Palette Indexes (for world map)
  $1F80 Current Song
$1F81-$1FA0 Saved Object Map Indexes
  $1FA1 Step counter used as an RNG Seed in determining the next random
encounter.
  $1FA2 Battle counter used as an RNG Seed in determining the monster
formation.
  $1FA3 RNG salt for use with $1FA2 (increments +23 when $1FA2 goes over
255.)
  $1FA4 RNG salt for use with $1FA1 (increments +17 when $1FA1 goes over
255.)
  $1FA5 Veldt battle group number.
+ $1FA6 Pointer to Current Showing Character's Object Data
$1FA8-$1FBF Saved timer data (from $1188)
+ $1FC0 Party XY Position
$1FC2-$1FD1 Event Variables
+ $1FC2 Points from Narshe security checkpoint/Emperor's banquet
+ $1FC4 Narshe security checkpoint variable
+ $1FC6 -
+ $1FC8 -
+ $1FCA -
+ $1FCC -
+ $1FCE Number of Dragons Left
+ $1FD0 Cid's Health/Pieces of Coral
  $1FD2 parent facing direction
$1FD3-$1FF2 Character Saved XY Positions (2 bytes each)
$1FF3-$1FF6 Party Z Levels
$1FF7-$1FFD -
+ $1FFE Saved Game Data CheckSum ($1600-$1FFD)

```

\$7E/2000-\$7F/FFFF Field WRAM

```

$7E2000-$7E5FFF Object Map Data (object number x 2, $FF means no object)
$7E6000-$7E6BFF Terra Outline Graphics (not implemented)
$7E6C00-$7E71FF -
$7E7200-$7E73FF Color Palettes (unmodified)
  $7E7200 Dialog Text Palette (uses first four colors only)
  $7E7220 Map Palettes
  $7E72E0 Dialog Window Palette (last 8 colors only)
  $7E7300 Sprite Palettes
  $7E73E0 Vehicle Palette (overwritten for character portrait)
$7E7400-$7E75FF Color Palettes (active)
$7E7600-$7E76FF tile properties byte 1 ($F7 = always impassable, $07 =
counter tile, can be talked over)
  lrdbtslu
  l: tile uses up/left movement (stairs)

```

```

    r: tile uses up/right movement (stairs)
    d: door tile
    b: bottom sprite shown above priority 1 bg (not active for
bridge tiles, ZoneDoctor: "0.4")
    t: top sprite shown above priority 1 bg (not active for
bridge tiles, ZoneDoctor: "0.3")
    s: bridge tile (ZoneDoctor: "solid tile, cannot be walked
on")
    l: passable on lower z-level (ZoneDoctor: "Solid to tier 2",
if both of these are set, this tile can be a transition between upper and
lower)
    u: passable on upper z-level (ZoneDoctor: "Solid to tier 1")
$7E7700-$7E77FF tile properties byte 2
    nu--btrl
    n: npc can randomly move here (ZoneDoctor: "Passable
quadrants")
    u: always face up (ladder)
    -: (ZoneDoctor: "1.5")
    -: (ZoneDoctor: "1.4")
    b: passable through bottom
    t: passable through top
    r: passable through right
    l: passable through left
$7E7800-$7E78FF Sprite High Data Pointers
$7E7900-$7E79FF Sprite High Data Inverse Bit Masks
$7E7A00-$7E7AFF Sprite High Data Bit Masks
$7E7B00-$7E7B3F Flashlight Data

$7E7B40-$7E7E72 HDMA Tables
-----
$7B40-$7B9A Unused HDMA Table
$7B9B-$7BF5 Channel #7: Mosaic/BG Location HDMA Table (+++$2106)
$7BF6-$7C50 Channel #4: BG1 Scroll HDMA Table (+$210D)
$7C51-$7CAB Channel #0: BG2 Scroll HDMA Table (+$210F)
$7CAC-$7D06 Channel #3: BG3 Scroll HDMA Table (+$2111)
$7D07-$7D61 Channel #2: Fixed Color Add/Sub HDMA Table ($2132)
$7D62-$7DBC Channel #5: Window 2 Position HDMA Table (+$2128)
$7DBD-$7E17 Channel #6: Main/Sub Screen Designation HDMA Table (+212C)
$7E18-$7E72 Channel #1: Color Add/Sub Settings HDMA Table (+2130) ****
$7E73-$7ECC Saved Screen Pixelation/BG Location HDMA Table
$7ECD-$7F26 Saved BG1 Scroll HDMA Table (+$210D)
$7F27-$7F80 Saved BG2 Scroll HDMA Table (+$210F)
$7F81-$7FDA Saved BG3 Scroll HDMA Table (+$2111)
$7FDB-$8034 Saved Fixed Color HDMA Table ($2132)
$8035-$808E Saved Window 2 Position HDMA Table (+$2128)
$808F-$80E8 Saved Main/Sub Screen Designation HDMA Table (+212C)
$80E9-$8142 Saved Addition Subtraction HDMA Table (+2130) ****

$7E8143-$7EFFFF HDMA Data
```

```
-----
$8143-$8162 Unused Data
$8163-$81B2 Main/Sub Screen Designation Data (+212C)
$81B3-$8272 Mosaic/BG Location Data (+++$2106)
$8273-$8292 BG1 Upper Scroll Data (4 bytes each, horizontal then vertical)
$8293-$82B2 BG1 Lower Scroll Data
$82B3-$82D2 BG2 Upper Scroll Data
$82D3-$82F2 BG2 Lower Scroll Data
$82F3-$8312 BG3 Scroll Data
$8313-$8532 BG1 Scroll Data for Dialog Window
$8533-$8572 BG1 Scroll Data for Map Name Dialog Window
$8573-$85F2 BG3 Scroll Data for Map Name Dialog Window
$85F3-$8712 BG3 Scroll Data for Dialog Window
$8713-$8732 BG3 Scroll Data (unused)
$8733-$8752 BG3 Scroll Data for Horizontal Fade Bars (from ending)
$8753-$8762 Fixed Color Add/Sub Data (default)
$8763-$87A2 Fixed Color Add/Sub Data for Spotlights (unused)
$87A3-$8902 Fixed Color Add/Sub Data (unused)
$8903-$8942 Fixed Color Add/Sub Data for Horizontal Fade Bars (from ending)
$8943-$8AD2 Fixed Color Add/Sub Data for Dialog Window
$8AD3-$8C62 Color Add/Sub Settings for Dialog Window
$8C63-$8C72 Color Add/Sub Settings (default)
$8C73-$8C82 Color Add/Sub Settings for Horizontal Fade Bars (from ending)
$8C93-$8CA2 Color Add/Sub Settings (unused)
$8CA3-$8CB2 Window 2 Position Data for Dialog Window
$8CB3-$8E53 Window 2 Position Data (odd frames)
$8E53-$8FF2 Window 2 Position Data (even frames)
$8FF3-$9002 Window 2 Position Data (first row)

$9003-$9182 Dialog Text Graphics Buffer
-----
$9003-$9022 Current 16x16 Character Graphics, bpp 1-2 (main)
$9023-$9042 Next 16x16 Character Graphics, bpp 1-2 (main)
$9043-$9062 Current 16x16 Character Graphics, bpp 3-4 (shadow)
$9063-$9082 Next 16x16 Character Graphics, bpp 3-4 (shadow)
$9083-$90C2 Dialog Text Graphics VRAM Buffer ($40 bytes -> VRAM $3800)
$90C3-$9102
$9103-$9122 Current 16x16 Text Graphics, bpp 1-2 (main)
$9123-$9142 Next 16x16 Text Graphics, bpp 1-2 (main)
$9143-$9162 Current 16x16 Text Graphics, bpp 3-4 (shadow)
$9163-$9182 Next 16x16 Text Graphics, bpp 3-4 (shadow)

$9183-$9DFF Dialog Text Buffer
$9E00-$9EFF VWF Widths
$9F00-$A6FF BG1/BG2 Animation Graphics

$BF00-$CEFF BG3 Animation Graphics

$F120-$F800 Saved $0520-$0C00

$7F0000-$7FBFFF Map Data
```

\$0000-\$3FFF BG1 Map Data
\$4000-\$7FFF BG2 Map Data
\$8000-\$BFFF BG3 Map Data xytttttt (x = x flip, y = y flip, t = tile index)
\$C000-\$C7FF BG1 Tile Formation
\$C800-\$CFFF BG2 Tile Formation
\$D000-\$D03F BG3 Tile Formation (palette only)
\$D040-\$D83F Used as a buffer for decompressing map data etc.
\$D840-\$D8BF Partial BG1 Map for Horizontal Scrolling (2 x 32 tiles, 2 bytes per 8x8 tile) (first column, second column)
\$D8C0-\$D93F Partial BG2 Map for Horizontal Scrolling (2 x 32 tiles, 2 bytes per 8x8 tile) (first column, second column)
\$D940-\$D9BF Partial BG3 Map for Horizontal Scrolling (2 x 32 tiles, 2 bytes per 8x8 tile) (first column, second column)
\$D9C0-\$DA3F Partial BG1 Map for Vertical Scrolling (2 x 32 tiles, 2 bytes per 8x8 tile)
\$DA40-\$E1BF Partial BG2 Map for Vertical Scrolling (2 x 32 tiles, 2 bytes per 8x8 tile)
\$E1C0-\$E23F Partial BG3 Map for Vertical Scrolling (2 x 32 tiles, 2 bytes per 8x8 tile)
\$D9C0-\$E1BF BG1 Map for Full Updates (32 x 32 tiles, 2 bytes per 8x8 tile)
\$E1C0-\$E9BF BG2 Map for Full Updates (32 x 32 tiles, 2 bytes per 8x8 tile)
\$E9C0-\$F1BF BG3 Map for Full Updates (32 x 32 tiles, 2 bytes per 8x8 tile)
\$F1C0-\$F1CF Saved Actor Index
\$F1D0-\$F1DF Saved Level
\$F1E0-\$F20F Saved Experience

\$F800-\$FFFF Decompression Buffer

Field VRAM

\$0000-\$2FFF BG1/BG2 Graphics
 \$2800 BG1/BG2 Animation Graphics
 \$2E00 Dialog Window Graphics (28 tiles)
\$3000-\$3FFF BG3 Graphics
 \$3800 Dialog Text Graphics
\$4000-\$43FF Dialog Window Map Data
 \$4020 Window at top of screen
 \$4240 Window at bottom of screen
\$4400-\$47FF Dialog Text Map Data
 \$4420 Window at top of screen
 \$4640 Window at bottom of screen
\$4800-\$4FFF BG1 Map Data - 2 buffers that are swapped between during on-screen element updates (e.g. opening doors and chests.)
 \$4800 - Start Buffer (4bbp, 32x32 map size, 8x8 tile size)
 \$4C00 - Alternate Buffer (4bbp, 32x32 map size, 8x8 tile size)
\$5000-\$57FF BG2 Map Data - 2 buffers that are swapped between during on-

screen element updates (e.g. in Narshe cave).

\$5000 - Start Buffer (4bbp, 32x32 map size, 8x8 tile size)

\$5400 - Alternate Buffer (4bbp, 32x32 map size, 8x8 tile size)

\$5800-\$5FFF BG3 Map Data - 2 buffers that are swapped between during on-screen element updates.

\$5800 - Start Buffer (4bbp, 32x32 map size, 8x8 tile size)

\$5c00 - Alternate Buffer (4bbp, 32x32 map size, 8x8 tile size)

\$6000-\$7FFF Sprite Graphics

\$6000 Object Graphics

\$6C00 Overlay Graphics

\$7000 Character Portrait Graphics

\$7200 Vehicle Graphics

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