General Info

General information about the game that doesn't need more than one page to explain

- Background Scrolling Data Info
- Camera
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- Entrances
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- List of Activator Actors
- List of player animations
- Music List
- Particle List
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Background Scrolling Data Info
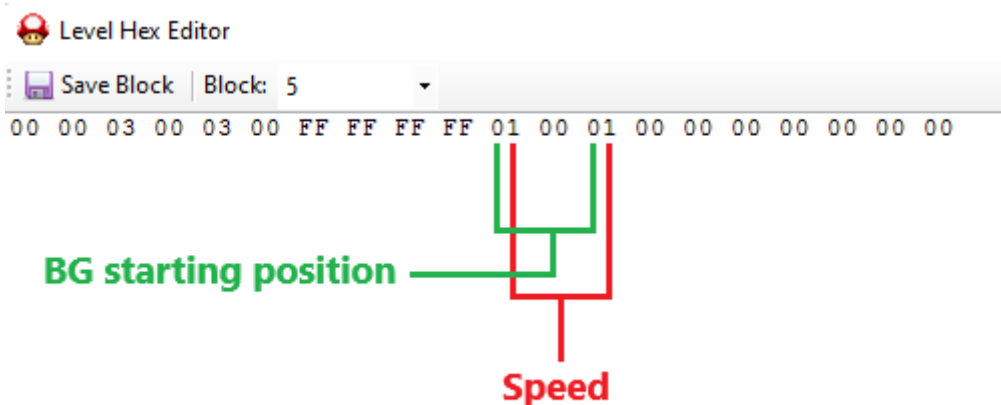
Foregrounds and backgrounds scroll differently in many levels — sometimes they have a fast speed ratio and sometimes they can be completely static. This can be adjusted by hex editing your level.

- **Bottom background** --> Change block 3.
- **Top background** --> Change block 5.

- Byte 11: Control BG horizontal scrolling.
- Byte 13: Control BG vertical scrolling.

And for each byte:

- First Nybble: Controls where the background starts relative to the view and how it loops. This seemingly does nothing for horizontal looping or start position.
- Second Nybble: Controls scroll speed relative to stage foreground speed.

(*Image source: MarioSunshine*)

Start position and loop data

- 0x0: Starts from bottom of view offset by 32px; loops entire background.
- 0x1: Starts from top of view offset by 32px; loops entire background.
- 0x2: Duplicate of 0x0?
- 0x3: Duplicate of 0x1?
- 0x4: Starts from bottom of view offset by 32px; loops top half of background.
- 0x5: Starts from top of view offset by 32px; loops bottom half of background.

Any value higher than 0x5 freezes the game.

Scroll speed data

Table address in overlay 0: `0x0002F468`
Table address in memory: `0x020C7B48`

- 0x0: Same as FG speed. Used in w2-3 (sewer level) for example.
- 0x1: 50% FG speed.
- 0x2: 25% FG speed. Common for top backgrounds.
- 0x3: 12.5% FG speed. Common for bottom backgrounds.
- 0x4: 120% FG speed. Unused.
- 0x5: 75% FG speed.
- 0x6: 6.25% FG speed.
- 0x7: 9.375% FG speed.
- 0x8: 20.3125% FG speed.
- 0x9: Same as FG speed.
- 0xA: Same as FG speed.
- 0xB: Same as FG speed.
- 0xC: Same as FG speed.
- 0xD: 200% FG speed. Unused.
- 0xE: 400% FG speed. Unused.
- 0xF: 800% FG speed. Unused.

(*Source: RoadrunnerWMC*)

Disabling vertical scrolling

- **Bottom background** --> Change both bytes 13 and 16 of block 3.
- **Top background** --> Change both bytes 13 and 16 of block 5.

- Byte 13: set to 0x40.
- Byte 16: set to 0x10.

(*Source: MeroMero*)

Automatic horizontal scrolling

Works for any background that already has parallax scrolling. This can be achieved by putting a value of 0x10 for byte 16 and it will scroll the whole background instead of only some of it.

(Note: if byte 13 value is somewhere between 0x40 and 0x4F, this effect will be overridden and instead the vertical scrolling will be disabled).

Camera

The Camera in New Super Mario Bros is controlled in several ways. You have to take into account that the camera movements will condition the gameplay.

1. How the Camera restricts Mario

The camera restricts Mario's movements in two ways:

• Mario cannot go out of the camera view through the sides.
This means that if the camera doesn't pan further, Mario can't either. The camera sides act like walls (but you can't wall jump into them)
• Mario cannot go to the bottom of the camera.
If he does so, he will die. Note that there is some margin, so you can place something like a Warp to Level some blocks below the camera view. Mario will get it before he dies.

Mario does can go out from the top of the camera. Simply the camera will not pan there, so Mario will be out of the screen.

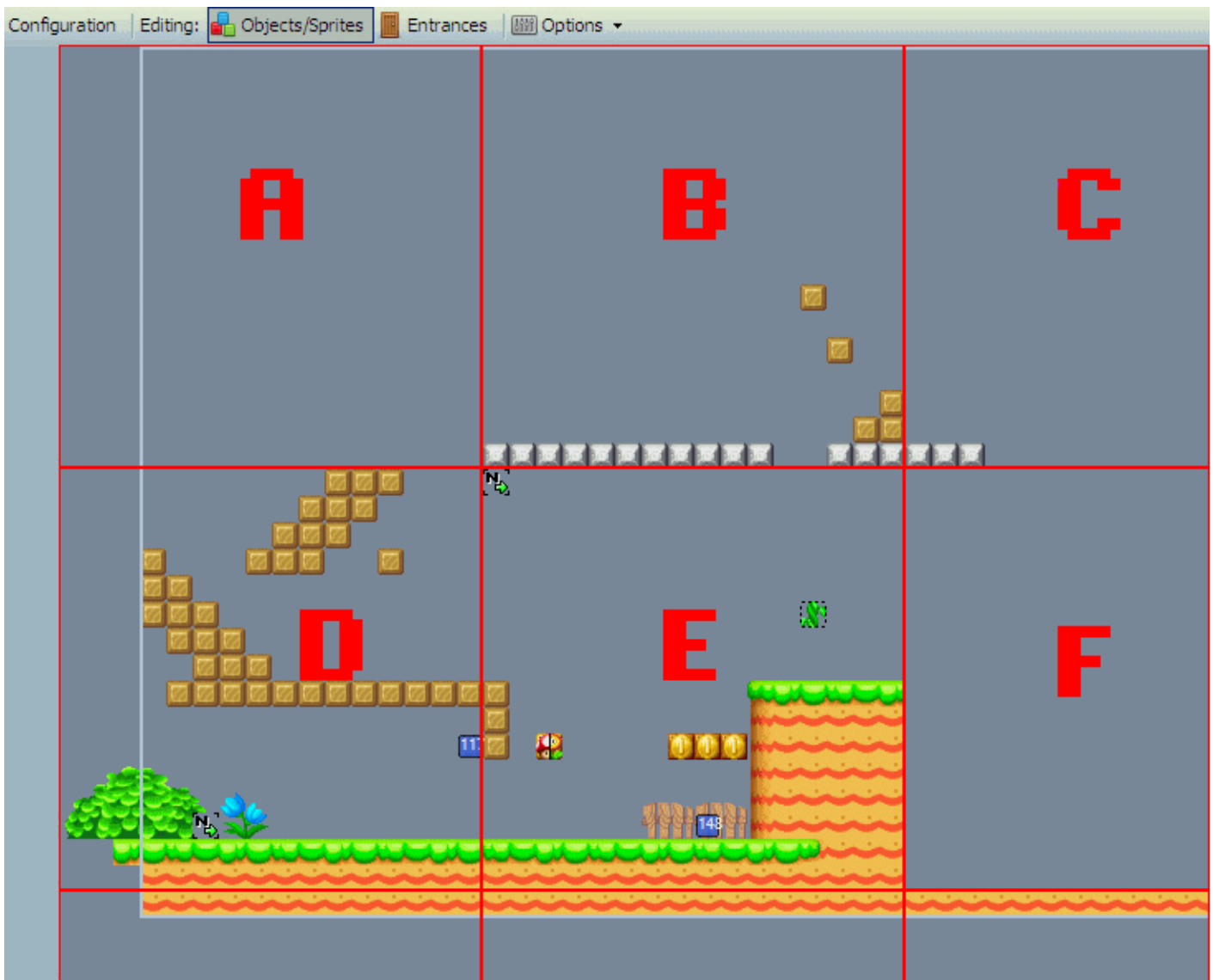## 2. Views

The camera will NEVER get out of the view. That means Mario can't get out of the view by the sides or the bottom.

3. Panning blocks

This thing is a little bit confusing. An area (not each view) is divided in blocks of 16x16 tiles (256x256 pixels). The camera will not pan into blocks that are empty (don't contain any objects).

An example (thanks to Garmichael):
Look at this level:

Notice that blocks A and F are empty. Mario cannot get to A from B, but he can actually jump from D to B. While he is in A, the camera will not move, but as soon as he crosses into B, the camera will jump to that location and that boundary would act like a wall. From there, As Mario approaches C, he will be able to see some of F, but as soon as he crosses into C, the camera will reposition so that the border to F is the bottom of the screen. If Mario jumps down into F, he dies (even though the block under F has ground).

4. Scroll Control and Scroll Stop sprites

These sprites control the camera in more ways. How they work is generally unknown, except for:
• Vertical scroll controls: [sprite:198] and [sprite:199]
• Horizontal scroll stop: [sprite:276]

5. Header Blocks

Block 2, Block 4, and Block 5 control more settings of the camera. Look at the List of Header Blocks page for more info.

6. Camera X & Y

The entrance's settings include two boxes named "Camera X" and "Camera Y", usually you can leave their values as 0, but sometimes you need to put values in there:
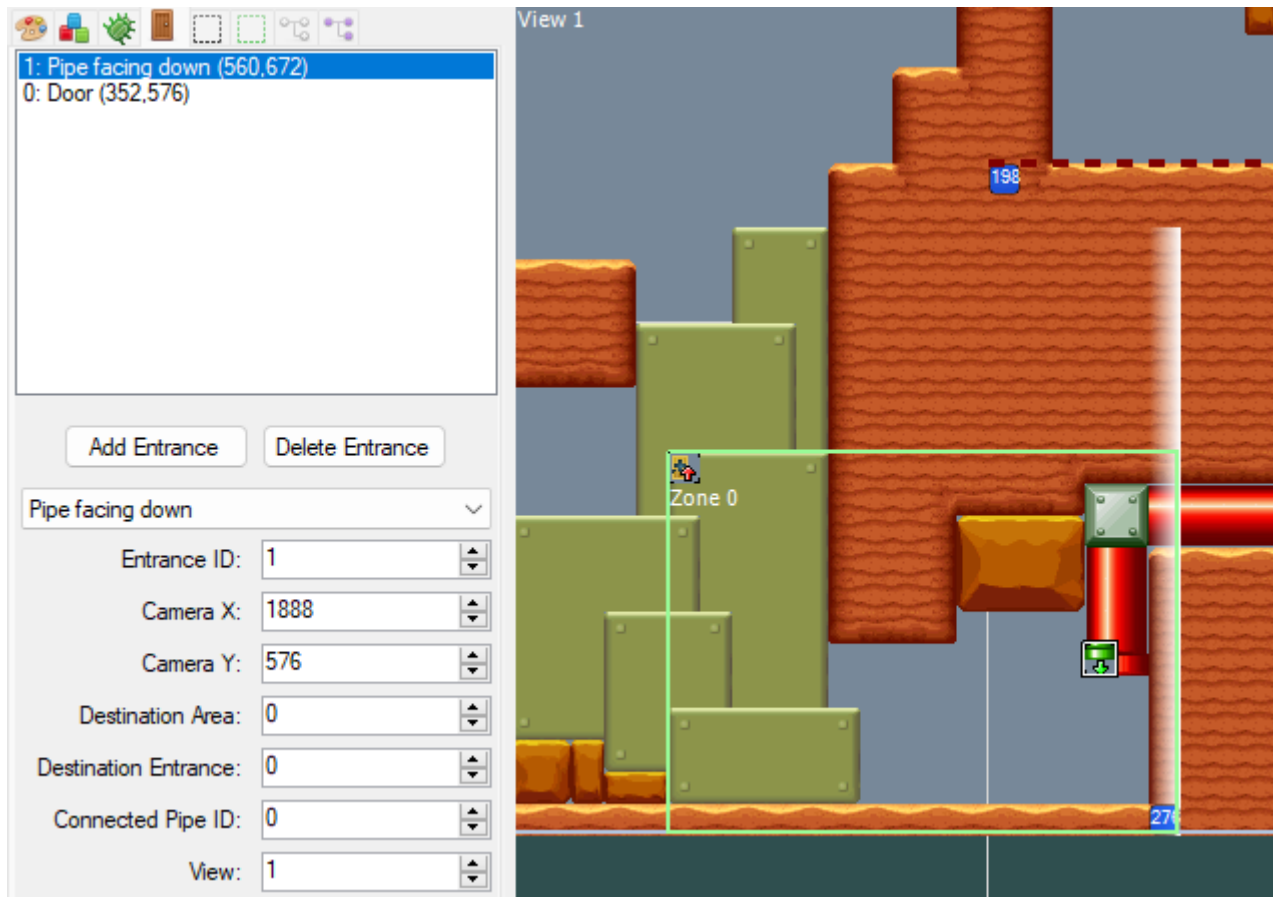
The zone and door entrance don't actually have any purpose in-game but to showcase the coordinates.
The zone delimits what you can see on the NDS screen.
If at least one of the Camera values is different from 0, then the tile at said coordinates will calibrate the camera and will serve as the top-left tile of said camera.
You usually use them when sprites 198-199 and/or 276 are in the way, or eventually to calibrate the bottom of the camera to the bottom of the zone.
The purpose of this is to show a nice transition when you change areas.

With the example earlier if both values were at 0, this is where the camera would spawn by default:
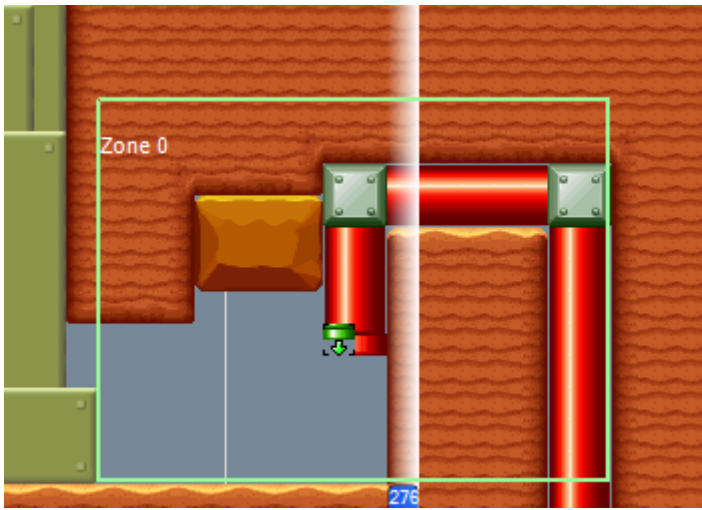
The camera is 1 tile higher than the bottom of the zone, but the biggest offender here is the sprite 276, it is only acknowledged when the player have control of Mario thus only when Mario completely exits the pipe, the camera would recognize sprite 276 and then scroll to the left at high speeds, which results in an ugly transition and you can bet this is a rookie mistake to leave that kind of camera error unchecked.

Connected Pipes

Each end of the pipe needs an Entrance. Both must have the same connected pipe ID.
Set area 0 in one end and area 1 in the other end.

Make a Path with the same ID as the entrance's "Connected Pipe ID".
Each node on the path must be placed and "Value 6" in the node numbered as below:

Image of how to place the node in each pipe with its value:
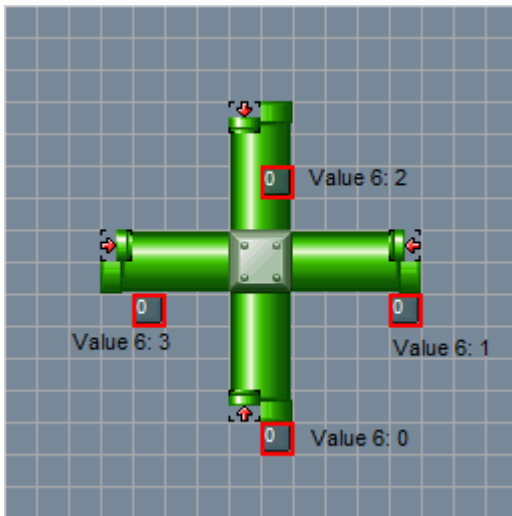
If value 6 does not show up for you, then try using the original NSMBe.

The path must be connected from one end of the pipe to the other; this is just to show the placement.
You can place more nodes on the path if you need, only the first and last need the above value 6 number.
World 7-A area 2 is good for more information.

Example shapes:
Reverse L

Setting a pipe as "exit only" also works, and is used in retail (eg 7-A).

Entrances

1. Entrance Guide

Click the Door icon at the top to edit entrances.

 Settings

• *Camera X:**

• *Camera Y:**

• *Entrance ID:** The ID associated with the entrance.

• *Destination ID:** The number of the area the pipe goes to. If not changing area, set to 0.
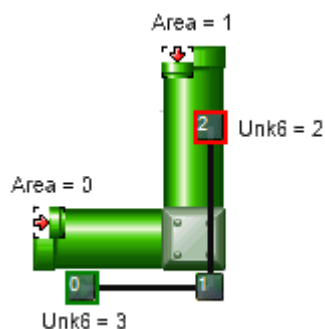
• *Destination Entrance:** The ID of the entrance it goes to.

• *Connected Pipe ID:** The ID of the path that makes up the pipe. Remember to check "Connected Pipe".

• *View:** The ID of the view the entrance is currently in. Not the destination view.

• *Exit Only:** Check this if you don't want the player to be able to enter, I.E. a one-way pipe.

• *<entrancesetting16>:** Not sure what it does.

• *Connected Pipe:** Check this if you're using a connected pipe. (Such as 7-A)

• *Display on Lower Screen:** Displays the view on the lower screen that the entrance is currently in.

 Warp Pipe

Warp pipes are the way Mario gets around to different Views or Areas.

 Simple Warp Pipe

First off, build a warp pipe using blocks. For this, I'll be using a upwards warp pipe, (object type

102)

• Place the warp pipe, make sure it's vertical. (And make sure it extends into the ground or is at least 3 blocks high.)
• Click the door icon, and add an entrance.
• Using shift+dragging, place it onto the top left part of the warp pipe.
• Click the drop down menu on the left side, select "Pipe facing Up." Set the View that it's in.
• (Note the Entrance ID if you plan to make it both ways.)
• Now go build another warp pipe somewhere else, make it horizontal this time.. (Either in the same Area or not.)
• Add an entrance, move it with shift+dragging, and place it at the top of the end.
• Set the entrance to "Pipe Facing Right."
• Check "Exit-Only." If it's in a different View, be sure to set the View it's in.
• Note it's Entrance ID, and select the first warp pipe entrance you created.
• Set the "Destination Area" to whatever area the second warp pipe is in (if you created it in another area) and set the Destination ID to the Entrance ID of the second warp pipe entrance.
• Save, and test it. It should work.

• *Troubleshooting:**
If you appear at the start of the level or in another spot not intended, check the "Destination ID".

If your camera appears somewhere without Mario, and then you die, check that the destination entrance has the View set correctly.

 Connected Warp Pipe

For this, I'm gonna go ahead and make a pipe that goes up then a turn to the left. (Use Shift+dragging on a block to change length and height.) Use object 59 for a good looking turn.

Set that up, and add the entrances. You don't have to set a Destination ID.

• First, click the first path icon.
• Add a path, and set it up so the first square (0) is down 2 squares, and right 1 square from the leftmost entrance.
• Next, use Control+dragging to make two more squares, one at the top of the bottommost pipe, one to the bottom left of the entrance.
• Set up the paths with this trick.

Unknown 6:
0=Pipe facing down
1=Pipe facing right
2=Pipe facing up
3=Pipe facing left

In my pipe,

square 0 is //Unknown 6: 3//
square 2 is //Unknown 6: 0//

• Now select each entrance, check "Connected Pipe", and set the Connected Pipe ID to the Path ID of the paths you just set up (IE. 0)
• For the entrance closest to the end of the path, set "Destination Area" to 1.
• Save and Play.

• *Troubleshooting**
If you enter the pipe, and a transition appears, check "connected pipe" on both entrances.

If you enter the pipe, then come back out immediately, doublecheck that the entrance closest to the end of the path has "Destination Area" set to 1, and that the "Connected Pipe ID" is correctly set.

File Table

A table of contents for the files inside of a NSMB DS ROM.

Note: **bold** entries are files.

> TODO: Expand this table to contain all files, splitting the table if needed

Filepath	Description
fnt.bin	*File Name Table* It contains filenames, folders and folders names.
fat.bin	*File Allocation Table* It contains every file's address in the rom and its size.
header.bin	[Header](#)
arm9ovt.bin	It lists every arm9 overlay, its location in the rom and where it should be loaded in the ram.
arm7ovt.bin	It should list every arm7 overlay, its location in the rom and where it should be loaded in the ram.
arm9.bin	The code for the main processor.
arm7.bin	*The code for the coprocessor.*
banner.bin	Contains the game banner text and icon shown in the system bios
rsasig.bin	*Some signature*
/	Root folder
/00DUMMY	*Empty, NSMBe uses it to store tileset, their objects' descriptions, backgrounds and music names after renaming them*
/BUILDTIME	*Last game build time*
/ mgvs_sound_data.sd at	*Minigames music*
/sound_data.sdat	*Main game music*

Filepath	Description
/ARCHIVE/	Contains archives for minigames and download play
/BG_chk/	Contains tile behaviour files for tilesets
/BG_ncg/	Contains bitmaps for tilesets, backgrounds, and tile animations
/BG_ncl/	Contains palettes and palette animations for tilesets and backgrounds, as well as jyotyu palette
/BG_nsc/	Contains tilemaps for backgrounds
/BG_pnl/	Contains tilemaps for tilesets
/BG_unt/	*Objects info for tilesets*
/course/	*It contains all the levels .bin files*
/demo/	*It contains some cutscene stuffs*
/ending/	*It contains other ending stuffs (like the tower BG)*
/enemy/	*It contains the enemies' models and animations*
/ipl/	Contains bitmap and palette for DS Download Play banner icon
/map/	*It contains all the Worldmap files*
/obj/	Contains bitmaps and palettes of in-course sprites
/particle/	Contains particle archives
/player/	*It contains player's models and animations*
/polygon_unit/	*It contains some levels effects, the quicksand files, the pipe graphics, and the End-of-level graphics*
/script/	*It contains BMG files (used for In-Level pause scripts, Worldmap's pause scripts, and for the Titlescreen's File Select scripts)*
/uiStudio/	Contains files related to game UI
overlay7/	*It should contain the overlays for the arm7 processor*
overlay9/	*It contains the overlays for the arm9 processor*

Files in Overlays and ARM9

> TODO:
> - File IDs of files in archives.
> - More files?
> - Maybe the makeshift file tree could be replaced with something else.

This page documents every file that isn't in the regular file system so that they are easier to find.

Location	File type	Address	Compression	Info
ARM9	NARC	0x026CE0-0x03267B	None	Internally named **menu_common**. Contains multiplayer loading screen graphics and minigame menu graphics.
ARM9	NARC	0x03267C-0x03744F	None	Internally named **message_common**. Contains the menu window font, the fireball loading graphic, and error message files.
ARM9	SDAT	0x037450-0x039807	None	Multiplayer loading screen SDAT.
Overlay 0	.bin (tile behaviour)	0x02FDA4-0x0301A3	None	Jyotyu tileset tile behaviours.
Overlay 1	_ncg.bin	0x000E64-0x001453	LZ77	Bootscreen Nintendo logo graphics
Overlay 1	_ncl.bin	0x001634-0x001653	None	Bootscreen Nintendo logo palette.
Overlay 1	_nsc.bin	0x001654-0x001843	LZ77	Bootscreen Nintendo logo tilemap.
Overlay 1	_ncg.bin	0x001844-0x00256B	LZ77	Bootscreen copyright info graphics.
Overlay 1	_ncl.bin	0x00256C-0x00258B	None	Bootscreen copyright info palette.
Overlay 1	_nsc.bin	0x00258C-0x002843	LZ77	Bootscreen copyright info tilemap.
Overlay 8	_ncl.bin	0x01E198-0x01E397	None	Credits text palette.

Location	File type	Address	Compression	Info
Overlay 8	_ncg.bin	0x01E730-0x021F2F	None	Credits text graphics.

📁 FILESYSTEM [menu_common]
├📄 fnt.bin
├📄 fat.bin
└📁 root
└📁 menu
└📁 common
├🖼️ d_2d_UI_O_2P_game_DL_boot_b_d_ncg.bin
├🎨 d_2d_UI_O_2P_game_DL_boot_b_d_ncl.bin
├🖼️ d_2d_UI_O_2P_game_DL_boot_b_d_nsc.bin
├🎨 d_2d_UI_O_2P_game_DL_boot_o_d_ncl.bin
├🖼️ d_2d_mgvs_bg_layer01_nsc.bin
├🖼️ d_2d_mgvs_bg_layer13_nsc.bin
├🖼️ d_2d_mgvs_bg_layer_message01_nsc.bin
├🖼️ d_2d_mgvs_bg_menu_common01_nsc.bin
├🖼️ d_2d_mgvs_bg_menu_common03_nsc.bin
├🎨 d_2d_mgvs_bg_menu_common_J_ncl.bin
├🎨 d_2d_mgvs_menu_common_J_ncl.bin
└📁 USA
├🖼️ UI_O_2P_game_DL_boot_d.bncl
├🖼️ UI_O_2P_game_DL_boot_o_d_ncg.bin
├🖼️ d_2d_mgvs_bg_menu_common_ncg.bin
└🖼️ d_2d_mgvs_menu_common_nce_ncg.bin

📁 FILESYSTEM [message_common]
├📄 fnt.bin
├📄 fat.bin
└📁 root
└📁 message
└📁 common
├🎨 d_2d_mario_3Dfont_ncl.bin
└📁 USA
├🖼️ d_2d_mario_3Dfont_ncg.bin
├📄 error.bmg
├🖼️ font_a.NFTR
├🖼️ font_b.NFTR
└🖼️ msg_data.bin

Glossary

This page briefly defines some of the jargon you may encounter while modding New Super Mario Bros.; this will generally not cover more broadly-used terms such as tilemap, palette, archive, and so forth.

Code patch: A piece of code which is compiled then inserted into the game. Also referred to as a **code hack**, **code mod**, or **ASM hack** (though the latter is considered a misnomer and usage of it is proscribed — it is listed here only for posterity).

Control byte: A byte that controls how a map16 tile tiles in a tile object.

Map16: The tilemap for tilesets.

Map16 tile: A 16x16 tile composed of four 8x8 tiles. These can have tile behaviors set for them and are used in tile objects. May also be simply referred to as a tile.

Object: Can refer to both an actor that may exist in a stage (e.g., a bullet bill) or a tile object. The former is more common and may be also referred to as an **actor**.

Object bank: A set of objects that are set to load and can thusly be used in an area. Also referred to as a **sprite set** (proscribed).

Object ID: The ID of an object. Distinct from stage object ID. Also refered to as **class ID** (proscribed).

Object settings: A data field containing information about an object's settings and events it's connected to. Also referred to as a **sprite data** (proscribed).

Randomization: The property of a tileset to effectively randomly shuffle a certain set of map16 tiles in game to add visual variety.

Slope control tile: A tile with a control byte of 80 or over used to control how map16 tiles tile in a tile object. Mainly used in tile objects for slopes.

Stage object: An object that can be placed in a stage (e.g., a goomba). Also refered to as a **stage actor** or **sprite** (the latter being proscribed). Also may be truncated to object or sprite colliqually.

Stage object ID: The ID of an object that can be placed in a stage. Also refered to as **stage actor ID** or **sprite ID** (the latter being proscribed).

Tile behavior: How a map16 tile is meant to behave in a level when the player interacts with it. Also referred to as **tile type**.

Tile object: A unit of map16 tiles that can be placed in a level and are set to tile in a specific fashion. NSMBe refers to these simply as **object**s.

3D tile: A map16 tile which draws a texture instead of (or, in special cases, over) the 8x8 tiles present on the map16.

Level List

Every level in the game accompanied by its file name and how many areas it has.

Filename	Level Name	Area Count
A01	World 1-1	3 Areas
A02	World 1-2	3 Areas
A03	World 1-3	1 Area
A04	World 1-4	3 Areas
A05	World 1-5	2 Areas
A06	World 1-A	2 Areas
A07	W1 Tower	3 Areas
A08	W1 Castle	3 Areas
A09	Cannon (W1 to W5)	1 Area
B01	World 2-1	3 Areas
B02	World 2-2	2 Areas
B03	World 2-3	2 Areas
B04	World 2-4	2 Areas
B05	World 2-5	2 Areas
B06	World 2-6	2 Areas
B07	World 2-A	3 Areas
B08	W2 Tower	3 Areas
B09	W2 Castle	3 Areas
B10	Cannon (W2 to W5)	1 Area
C01	World 3-1	2 Areas
C02	World 3-2	2 Areas
C03	World 3-3	3 Areas
C04	World 3-A	3 Areas
C05	World 3-B	2 Areas
C06	World 3-C	2 Areas
C07	W3 Ghost House	3 Areas

Filename	Level Name	Area Count
C08	W3 Tower	2 Areas
C09	W3 Castle	2 Areas
C10	Cannon (W3 to W6)	1 Area
D01	World 4-1	1 Area
D02	World 4-2	2 Areas
D03	World 4-3	2 Areas
D04	World 4-4	2 Areas
D05	World 4-5	3 Areas
D06	World 4-6	2 Areas
D07	World 4-A	2 Areas
D08	W4 Ghost House	3 Areas
D09	W4 Tower	2 Areas
D10	W4 Castle	2 Areas
D11	Cannon (W4 to W7)	1 Area
E01	World 5-1	1 Area
E02	World 5-2	2 Areas
E03	World 5-3	2 Areas
E04	World 5-4	1 Area
E05	World 5-A	2 Areas
E06	World 5-B	1 Area
E07	World 5-C	2 Areas
E08	W5 Ghost House	3 Areas
E09	W5 Tower	2 Areas
E10	W5 Castle	2 Areas
E11	Cannon (W5 to W8)	1 Area
F01	World 6-1	2 Areas
F02	World 6-2	2 Areas
F03	World 6-3	2 Areas
F04	World 6-4	1 Area
F05	World 6-5	2 Areas
F06	World 6-6	3 Areas
F07	World 6-A	2 Areas

Filename	Level Name	Area Count
F08	World 6-B	1 Area
F09	W6 Tower 1	2 Areas
F10	W6 Tower 2	2 Areas
F11	W6 Castle	2 Areas
F12	Unused Cannon (W6 to W8)	1 Area
G01	World 7-1	1 Area
G02	World 7-2	2 Areas
G03	World 7-3	2 Areas
G04	World 7-4	1 Area
G05	World 7-5	3 Areas
G06	World 7-6	3 Areas
G07	World 7-7	1 Area
G08	World 7-A	2 Areas
G09	W7 Ghost House	3 Areas
G10	W7 Tower	2 Areas
G11	W7 Castle	2 Areas
H01	World 8-1	2 Areas
H02	World 8-2	3 Areas
H03	World 8-3	2 Areas
H04	World 8-4	2 Areas
H05	World 8-5	2 Areas
H06	World 8-6	2 Areas
H07	World 8-7	1 Area
H08	World 8-8	2 Areas
H09	W8 Tower 1	2 Areas
H10	W8 Tower 2	2 Areas
H11	W8 Castle	2 Areas
H12	W8 Final Castle	3 Areas
I01	1-Up Bonus Game	1 Area
I02	Item Bonus Game	1 Area
I03	Mega Mushroom Bonus Game	1 Area
I04	Bottom Screen Background Chooser	1 Area

Filename	Level Name	Area Count
J01	MvsL - SMB 1-1	1 Area
J02	MvsL - Underground	1 Area
J03	MvsL - Ice World	1 Area
J04	MvsL - Pipe World	1 Area
J05	MvsL - Castle	1 Area
J06	Unused Level 1	1 Area
J07	Unused Level 2	1 Area
J08	Unused Level 3	1 Area
J09	Unused Level 4	1 Area
J10	Unused Level 5	1 Area

List of Activator Actors

1. General Event Controllers

- [Class=020] [Object=101] Event Controller
- [Class=087] [Object=155] Special exit controller (warp entrance)
- [Class=137] [Object=164] Event Controller AND
- [Class=138] [Object=165] Event Controller OR
- [Class=139] [Object=166] Event Controller Random
- [Class=140] [Object=167] Event Controller Buffer
- [Class=141] [Object=168] Event Controller Zone
- [Class=142] [Object=286] Event Controller Sequencer
- [Class=255] [Object=169] Spin Block (unused Actor 255)

2. Switches and Other Event Controllers

- [Class=067] [Object=235] Star Coin
- [Class=086] [Object=152] Event trigger block
- [Class=151] [Object=034] Red Coin Ring
- [Class=242] [Object=107] ? Switch
- [Class=243] [Object=291] Brick Block containing ? Switch
- [Class=244] [Object=066] P Switch
- [Class=245] [Object=088] Brick Block containing P Switch
- [Class=246] [Object=108] ! Switch
- [Class=247] [Object=110] Brick Block containing ! Switch (unused actor)
- [Class=265] [Object=041] Bowser bridge switch (skull switch)

3. Triggerable Actors

- [Class=067] [Object=235] Star Coin
- [Class=079] [Object=103] Dorrie
- [Class=080] [Object=106] Red Coin
- [Class=092] [Object=192] Coin Spawner (unused actor)
- [Class=161] [Object=068] Lift moving up and down
- [Class=162] [Object=069] Lift moving left and right
- [Class=174] [Object=078] Lift moving one way once stood on
- [Class=183] [Object=099] Four platform rickshaw lift
- [Class=206] [Object=197] Tile Creator/Destroyer (Tile God)
- [Class=242] [Object=107] ? Switch
- [Class=243] [Object=291] Brick Block containing ? Switch
- [Class=244] [Object=066] P Switch
- [Class=245] [Object=088] Brick Block containing P Switch

- [Class=246] [Object=108] ! Switch
- [Class=247] [Object=110] Brick Block containing ! Switch (unused actor)
- [Class=263] [Object=292] Event Activated Door
- [Class=265] [Object=041] Bowser bridge switch (skull switch)
- [Class=276] [Object=218] Auto-scrolling controller
- [Class=278] [Object=231] Water
- [Class=279] [Object=234] Lava
- [Class=281] [Object=259] Poisoned Water

List of player animations

Name	Value	anmFile	anmName
Idle	0x00	plmario	wait
WalkSlow	0x01	plmario	walk
Walk	0x02	plmario	run
Dash	0x03	pl	b_dash
DashFast	0x04	pl	b_dash2
Jump	0x05	pl	jump
JumpFall	0x06	pl	jump2
JumpLand	0x07	pl	jumped
TripleJump_unused	0x08	pl	2jump1
TripleJumpFall	0x09	pl	2jump2
TripleJumpLand	0x0A	pl	2jumped; also used as DoubleJumpLand
TripleJump	0x0B	pl	roll_jump
Skid	0x0C	pl	turn
SkidTurn	0x0D	pl	trned
GroundPoundRoll	0x0E	pl	hipsr
GroundPoundFall	0x0F	pl	hipat
GroundPoundLand	0x10	pl	hiped
Crouched	0x11	pl	stoop
ThrowFireball	0x12	pl	fire_at
SlipBumpFall	0x13	pl	sdown
Sliding	0x14	plnovs	slip
StandUp	0x15	pl	sliped
SlipFall	0x16	plnovs	slipla
DiveLand	0x17	plnovs	sldctslpbk
DiveSlide	0x18	plnovs	lost
DiveStandUp	0x19	plnovs	roll (static)
RollPose	0x1A	pl	roll (loop)

Roll	0x1B	pl	carry_start
CarryStart	0x1C	pl	carry_wait
CarryIdle	0x1D	pl	carry_walk
CarryWalk	0x1E	pl	carry_throw
CarryThrow	0x1F	pl	scale_up
MegaGrow	0x20	pl	wimp
Walljump	0x21	pl	wsld
WallSlide	0x22	pl	swim_in; possibly unused
SwimStart	0x23	plnovs	swim_wait
SwimIdle	0x24	plnovs	paddle_1
SwimIdle1	0x25	plnovs	swim
Swim_legs	0x26	plnovs	paddle_2
SwimPaddle2	0x27	plnovs	paddle_end
SwimPaddleEnd	0x28	plnovs	tree_start
PoleGrab	0x29	plnovs	tree_wait
PoleIdle	0x2A	plnovs	tree_wait
PoleClimb	0x2B	plnovs	tree_climb
PoleSlide	0x2C	plnovs	tree_pose
PushedFall	0x2D	pl	shfdn
Push	0x2E	pl	push
SpinJump	0x2F	pl	spin_jump
SpinJumpLand	0x30	pl	spin_jump_end
CeilingRopeGrab	0x31	plnovs	monkey_start
CeilingRopeRightHandGrab	0x32	plnovs	monkey_wait_r
CeilingRopeLeftHandGrab	0x33	plnovs	monkey_wait_l
CeilingRopeRightHandMove	0x34	plnovs	monkey_r_to_l
CeilingRopeLeftHandMove	0x35	plnovs	monkey_l_to_r
LavaDamageJump	0x36	plnovs	firejmp
CrouchStart	0x37	pl	squat_start
SwimCarry	0x38	plnovs	swim_carry
SwimPaddleCarry	0x39	plnovs	paddle_carry
SwimThrow	0x3A	plnovs	swim_throw
BumpedNormal	0x3B	pl	sfbdn

BumpedHard	0x3C	pl	sffdn
CannonShoot	0x3D	pl	shoot
Shocked	0x3E	plnovs	e_shock
ShockedFall	0x3F	plnovs	e_down: unused
TightropeWalk	0x40	plnovs	rope_walk
MegaWalk	0x41	pl2	big_walk
MegaJump	0x42	pl2	big_jump_st
MegaJumpLand	0x43	pl2	big_jump_ed
MegaGroundPoundRoll	0x44	pl2	big_hip_st
MegaGroundPoundFall	0x45	pl2	big_hip_at
MegaGroundPoundLand	0x46	pl2	big_hip_ed
LedgeStand	0x47	plnovs	wall_wait
LedgeStandMoveLeft	0x48	plnovs	wall_walk_l
LedgeStandMoveRight	0x49	plnovs	wall_walk_r
LedgeStandClimbDown	0x4A	plnovs	hang_start
LedgeGrabClimbUp	0x4B	plnovs	hang_up
LedgeGrabIdle	0x4C	plnovs	hang_wait
LedgeGrabMoveLeft	0x4D	plnovs	hang_walk_l
LedgeGrabMoveRight	0x4E	plnovs	hang_walk_r
VineRopeIdle	0x4F	plnovs	rope_swing
SpinDrill	0x50	pl2	spin_jump2
JumpCombo2	0x51	pl2	jump_b
JumpCombo3	0x52	pl2	jump_c
JumpCombo4_kick	0x53	pl2	jump_d
LongJump	0x54	pl2	jump_b_1
LongJumpFall	0x55	pl2	jump_b_2
DoubleJump	0x56	pl2	2jmp_c_1
DoubleJumpFall	0x57	pl2	2jmp_c_2
BackflipJump	0x58	pl2	2jmp_d_1; possibly unused
BackflipJumpFall	0x59	pl2	2jmp_d_2
UnknownStarJump	0x5A	pl2	2jmp_e_1
UnknownStarJumpFall	0x5B	pl2	2jmp_e_2
JumpCombo5_twirl	0x5C	pl2	jump_e

PipeEntrance	0x5D	pl2	low_walk
DeadFall	0x5E	pl2	dead
DeadPose	0x5F	pl2	dead_pose
GoalJump	0x60	plnovs	goal_jump
GoalCap	0x61	plnovs	goal_puton_cap
DoorWalk	0x62	pl2	door_walk
BattleGoalJump	0x63	plnovs	bt_goal_jmp
BattleGoalOut	0x64	plnovs	bt_goal_out
MegaJumpFall	0x65	pl2	big_jmp_2
TightropeIdle	0x66	plnovs	rope_wait
TightropeJumpLand	0x67	plnovs	rope_jump_ed
MiniWalk	0x68	pl2	zero_g_walk
MiniJump	0x69	pl2	zero_g_jump
MiniJumpFall	0x6A	pl2	zero_g_jump2
MiniJumpLand	0x6B	pl2	zero_g_jump_ed
UnusedSpinJumpOff	0x6C	pl2	spin_jump_off; possibly unused
UnusedSpinJump	0x6D	pl2	spin_jump_st
Shell	0x6E	pl2	shell_in
StarRoll	0x6F	pl2	star_roll
FenceMoveVertical	0x70	plnovs	net_walk1
FenceIdle	0x71	plnovs	net_wait
UnusedDamageFall	0x72	plnovs	e_damage1
UnusedDamageLand	0x73	plnovs	e_damage2
FenceSlam	0x74	plnovs	net_attack
FenceMoveHorizontal	0x75	plnovs	net_walk2
LedgeJump	0x76	plnovs	w_jump1
LedgeJumpFall	0x77	plnovs	w_jump2
LedgeJumpLand	0x78	plnovs	w_jump_ed
LedgeGrab	0x79	plnovs	jump_hang
SwimWalk	0x7A	plnovs	swim_walk
SwimStanding	0x7B	plnovs	swim_standing
Buried	0x7C	plnovs	buried

BuriedStandUp	0x7D	plnovs	buried_ed
BuriedFall	0x7E	plnovs	buried_st
BuriedDamage	0x7F	plnovs	buried_damage
MegaSitCrouch	0x80	pl2	big_hip_squat
WaterDeadFall	0x81	plnovs	swim_dead
TightropeUnbalanced	0x82	plnovs	rope_wait2
MegaIdle	0x83	pl2	big_wait
BossCallPeach	0x84	plnovs	find
BossStarePeach	0x85	plnovs	find_loop
BossReactPeach	0x86	plnovs	find_surprise
BossWin	0x87	plnovs	boss_key_get
MegaWin	0x88	plnovs	big_goal
FinalBossEnd	0x89	plnovs	m_kiss
FinalBossPeach	0x8A	plnovs	m_fall_wait
FinalBossCap	0x8B	plnovs	m_escort
FinalBossKiss	0x8C	plnovs	m_shy
GoalJumpLand	0x8D	plnovs	goal_jump_ed
BossIdle	0x8E	plnovs	bt_wait
BossStartled	0x8F	plnovs	bt_surprise
BeanStalkMove	0x90	plnovs	pea_plant
BeanStalkGrab	0x91	plnovs	pea_plant_st
BeanStalkIdle	0x92	plnovs	pea_plant_wait
BowserJrWin	0x93	plnovs	jr_clear

Music List

Level Header ID (Hex)	ID in NSMBe/Nitro Studio (Decimal)	Common Name	Name in NSMBe	SDAT Name (in sound_data.sdat)
00	0	None/MvsL Stage Theme 1 (in some cases)*	MvsL Stage	BGM_VS_CHIJOU
01	1	Tower	Tower	BGM_TRIDE.sseq
02	2	Starman	Starman	BGM_MUTEKI.sseq
03	3	Mega Mario	Mega Mario	BGM_HUGE.sseq
04	4	End of Level (+ MvsL battle win)	End of Level	BGM_COURSE_CLEAR.sseq
05	5	Death	Death	BGM_DOWN.sseq
06	6	Desert	Desert	BGM_SABAKU.sseq
07	7	Boss	Boss	BGM_BOSS.sseq
08	8	VS battle lose	VS Lose	BGM_VS_LOSE_FANFARE
09	9	Underground	Underground	BGM_CHIKA.sseq
0A	10	Bonus room	Bonus room	BGM_MAME.sseq
0B	11	Underwater	Underwater	BGM_WATER3.sseq
0C	12	Lava	Lava	BGM_KAZAN_SOTO.sseq
0D	13	End Credits (Early/Unused, shorter)	End Credits	BGM_SAMPLE
0E	14	Beach	Beach	BGM_SANBASHI.sseq
0F	15	Bowser Jr. Battle	Bowser Jr. Battle	BGM_KUPPAJR
10	16	Ghost House	Ghost House	BGM_OBAKE.sseq
11	17	Castle	Castle	BGM_SHIRO.sseq
12	18	Switch timer	Timer	BGM_SWITCH.sseq
13	19	End of Game Fanfare	End of Game Fanfare	BGM_FINAL_CLEAR
14	20	Game Over	Game Over	BGM_GAMEOVER.sseq
15	21	Final Boss	Final Boss	BGM_FINAL_KUPPA.sseq

Level Header ID (Hex)	ID in NSMBe/Nitro Studio (Decimal)	Common Name	Name in NSMBe	SDAT Name (in sound_data.sdat)
16	22	Boss Beaten	Boss Beaten	BGM_BOSS_CLEAR.sseq
17	None	[Nothing]		[Nothing]
18	24	Athletic	Mushrooms (Athletic)	BGM_ATHLETIC.sseq
19	25	Toad House	Toad House	BGM_MINIGAME.sseq
1A	26	Grassland	Grassland	BGM_CHIJOU_CONT.sseq
1B	27	Title Screen	Title Screen	BGM_SELECT.sseq
1C	28	SMB End of Level	SMB End of Level	BGM_GOAL_FANFARE2.sseq
1D	29	Toad House Fanfare	Toad House Fanfare	BGM_FANFARE_KINO.sseq
1E	30	MvsL Stage Theme 2*	MvsL Stage 2	BGM_VS_STAGE.sseq
1F	31	MvsL start screen (duplicate of Title Screen)	MvsL Title Screen	BGM_VS_SELECT.sseq
20	32	MvsL Loop	MvsL Results Screen	BGM_VS_FAN_LOOP.sseq
21	33	MvsL Win (Results screen)	MvsL Win	BGM_VS_WIN.sseq
22	34	MvsL Lose (Results screen)	MvsL Lose	BGM_VS_LOSE
[23 - 4F]	None	[Nothing]		[Nothing]
50	80	Lava ambient	Lava ambient (Castle)	BGM_AMB_YOUGAN
51	81	Desert wind ambient	Desert ambient (Castle)	BGM_AMB_SABAKU
52	82	Water ambient	Water ambient (Castle)	BGM_AMB_WATER
53	83	Cave Water Ambient	Underground ambient (Castle)	BGM_AMB_CHIKA
[84 - 85]	None	[Nothing]		[Nothing]
56	86	Sky Wind Ambient	Wind ambient (Castle)	BGM_AMB_SKY
[87 - 98]	None	[Nothing]		[Nothing]
63	99	MvsL Stage (Early)	Early Grassland (Unused)	BGM_CHIJO

Level Header ID (Hex)	ID in NSMBe/Nitro Studio (Decimal)	Common Name	Name in NSMBe	SDAT Name (in sound_data.sdat)
64	100	World 1*	World 1	BGM_WORLD1
65	101	World 2*	World 2	BGM_WORLD2
66	102	World 3*	World 3	BGM_WORLD3
67	103	World 4*	World 4	BGM_WORLD4
68	104	World 5*	World 5	BGM_WORLD5
69	105	World 6*	World 6	BGM_WORLD6
6A	106	World 7*	World 7	BGM_WORLD7
6B	107	World 8*	World 8	BGM_WORLD8
6C	108	End Credits	Ending	BGM_ENDING
6D	109	Intro Part 1	Intro 1	BGM_OPENING_DEMO 1
6E	110	Intro Part 2	Intro 2	BGM_OPENING_DEMO 2
6F	111	Peach Fanfare	Peach Fanfare	BGM_KUPPACLEAR_D EMO

*MvsL themes and World Map themes: Loading the MvsL themes or the World map themes in a regular level (by changing the music in the View Settings for example) will play the music, but most sound effects will be muted while the music is playing (this is because they use sound banks that are too big for the game, overloading the audio memory).

Additional note: Any song with an id above 6F will not play, regardless of if there is song data associated with it or not (by editing the sound_data.sdat file)

Particle List

Note: IDs can go as high as 255, all IDs past 118 are blank and have been left out for sake of shortening the list.

Particle Id	In-Game Effect	Notes
0	toadsworth creates toad house block(s) – part 2 red toad house disappears – part 3	
1		
2		
3	something in the intro	
4		
5	whomp destroyed – part 1	
6	whomp destroyed – part 2	
7	whomp destroyed – part 3	
8		
9	whomp slams ground – part 1	
A	whomp slams ground – part 2	
B	whomp slams ground – part 3	
C		
D	mario jumps/lands on world map	also used for flying ? blocks, hammer bros and bowser jr on the world map?
E	mario goes into castle on world map	
F		
10		

Particle Id	In-Game Effect	Notes
11	something todo with end-of-boss cutscene or world map?	
12		
13	bob-omb explodes - part 1	sometimes spawned (off-screen?) on world map
14	bob-omb explodes - part 2	sometimes spawned (off-screen?) on world map
15	bob-omb explodes - part 3	
16	bob-omb explodes - part 4	
17	bob-omb explodes - part 5	
18	bob-omb explodes - part 6	
19	bob-omb explodes - part 7	
1A		
1B	red toad house disappears – part 1	
1C	red toad house disappears – part 2 thwomp hits ground – part 1	
1D	thwomp hits ground – part 2	
1E	big thwomp hits ground – part 1	
1F	big thwomp hits ground – part 2	
20	big thwomp hits ground – part 3	
21	get mega mushroom – part 1	
22	get mega mushroom – part 2	
23	get mega mushroom – part 3	
24	get mega mushroom – part 4	
25	get mega mushroom – part 5	

Particle Id	In-Game Effect	Notes
26	get mega mushroom – part 6	
27	get mega mushroom – part 7	
28	get mega mushroom – part 8	
29	get mega mushroom – part 9	
2A	get mega mushroom – part 10	
2B	get mega mushroom – part 11	
2C	get mega mushroom – part 12	
2D		
2E		
2F		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39	mega mario walks right – alternating with 3A	
3A	mega mario walks right – alternating with 39	
3B		

Particle Id	In-Game Effect	Notes
3C	mega mario walks left – alternating with 3D	
3D	mega mario walks left – alternating with 3C / goal fireworks related? – part 6	
3E	goal fireworks related? – part 7	
3F	goal fireworks related? – part 8	
40	goal fireworks related? – part 9	
41	goal fireworks related? – part 10	
42		
43		
44		
45		
46		
47	goal fireworks related? – part 1	
48	goal fireworks related? – part 2	
49	goal fireworks related? – part 3	
4A	goal fireworks related? – part 4	
4B	goal fireworks related? – part 5	
4C	splunkin stomped on for the second time – part 1	
4D	splunkin stomped on for the second time – part 2	
4E	splunkin stomped on for the second time – part 3	
4F	splunkin stomped on for the first time – part 1	
50	splunkin stomped on for the first time – part 2	

Particle Id	In-Game Effect	Notes
51	bowser jr lands after being defeated	
52		
53		
54		
55		
56		
57		
58		
59		
5A		
5B		
5C		
5D		
5E		
5F		
60		
61		
62		
63		
64		
65		
66		

Particle Id	In-Game Effect	Notes
67		
68		
69		
6A		
6B		
6C		
6D		
6E		
6F		
70		
71		
72		
73	jump onto cliff ledge from normal ground	
74		
75		
76	item/object appears/disappears – part 1	
77	item/object appears/disappears – part 2	
78	item/object appears/disappears – part 3	
79	enemy/mega goomba "popped" – part 1 boss shutter piece spawned/destroyed – part part 1 bowser bridge piece destroyed – part 1	

Particle Id	In-Game Effect	Notes
7A	enemy/mega goomba "popped" – part 2 boss shutter piece spawned/destroyed – part part 2 bowser bridge piece destroyed – part 2	
7B		
7C		
7D		
7E	mario "twinkles" in distance after being fired by warp cannon	
7F		
80		
81		
82		
83		
84		
85		
86	run into enemy as mega mario	
87		
88		
89		
8A		
8B		
8C		
8D		

Particle Id	In-Game Effect	Notes
8E		
8F		
90		
91		
92		
93		
94		
95	blue coin collected	
96	mario breaks free from under fallen snow – part 1	
97	mario breaks free from under fallen snow – part 2	
98		
99		
9A		
9B		
9C		
9D	mario stomps on Crowber – part 1	
9E	mario stomps on Crowber – part 2	
9F	mario does Drill Stomp straight down	
A0	bowser jr/blockhopper jumps/lands	
A1	object enters/exits lava – part 1	
A2	object enters/exits lava – part 2	
A3	object enters/exits poison water – part 1	

Particle Id	In-Game Effect	Notes
A4	object enters/exits poison water – part 2	
A5	object enters/exits water – part 1	
A6	object enters/exits water – part 2	
A7		
A8	mario lands on soft cloud platform	
A9	mario lands on quicksand	
AA	mario lands on sinking snow – part 1	
AB	mario lands on sinking snow – part 2	
AC	mario fireball hits enemy/wall – part 1	
AD	mario fireball hits enemy/wall – part 2	
AE	stomp on wiggler	
AF		
B0		
B1		
B2	kab-omb explodes – part 1	
B3	kab-omb explodes – part 2	
B4	kab-omb explodes – part 3	
B5		
B6	ground-pound on koopa troopa/buzzy beetle – part 1	
B7	ground-pound on koopa troopa/buzzy beetle – part 2	
B8	ground-pound on koopa troopa/buzzy beetle – part 3	

Particle Id	In-Game Effect	Notes
B9	ground-pound on koopa troopa/buzzy beetle – part 4	
BA	"pop" enemy with ground-pound – part 1	
BB	"pop" enemy with ground-pound – part 2	
BC	"pop" enemy with ground-pound – part 3	
BD		
BE		
BF		
C0		
C1		
C2		
C3		
C4		
C5		
C6		
C7		
C8		
C9		
CA	mario stomps lakitu	
CB	mario lands in lakitu's cloud	
CC		
CD		

Particle Id	In-Game Effect	Notes
CE		
CF		
D0	bill blaster fires bullet bill – part 1	but not rotating bill blaster
D1	bill blaster fires bullet bill – part 2	"
D2	ground-pound on koopa troopa/buzzy beetle – part 5	
D3	ground-pound on koopa troopa/buzzy beetle – part 6	
D4		
D5		
D6		
D7		
D8	toadsworth creates toad house block(s) – part 1	
D9		
DA		
DB	skeeter bomb enters water or maybe skeeter spawns bomb – part 3	
DC	skeeter bomb enters water or maybe skeeter spawns bomb – part 4	
DD		
DE		
DF		
E0		
f8	Mario ground pound Falling snow hits ground	

Particle Id	In-Game Effect	Notes
E2	Mario lands after triple jump Mario ground pounds on mummipokey	
E3		
E4	mario goes out of water – part 1	
E5	mario goes out of water – part 2	
E6	mario goes out of water – part 3	
E7	mario exits water – part 1	
E8	mario exits water – part 2	
E9	mario exits water – part 3	
EA	get red coin	
EB		
EC		
ED		
EE	mario lands on ground in deep water – part 1	
EF	mario lands on ground in deep water – part 2	
F0		
F1		
F2		
F3	mario flies off Spin Block/out of tornado – part 1	
F4	mario flies off Spin Block/out of tornado – part 2	
F5	something todo with spinning/drill stomp – part 1	
F6	something todo with spinning/drill stomp – part 2	

Particle Id	In-Game Effect	Notes
F7	something todo with spinning/drill stomp – part 3	
F8	get star coin – part 1	
F9	get star coin – part 2	
FA	get star coin – part 3	
FB		
FC		
FD	?/p/! switch pressed – part 1	
FE	?/p/! switch pressed (alt – part upside down or underwater only?) – part 1	
FF	?/p/! switch pressed (alt – part upside down or underwater only?) – part 2	
100	?/p/! switch pressed – part 2	
101		
102		
103	mario does Drill Stomp when small mario	
104	mario wall jump from right – part 1	
105	mario wall jump from right – part 2	
106	mario wall jump from right – part 3	
107	mario wall jump from left – part 1	
108	mario wall jump from left – part 2	
109	mario wall jump from left – part 3	
10A		
10B		

Particle Id	In-Game Effect	Notes
10C	mario lands on /starts to hang off of cliff edge	
10D		
10E	mario goes into water in 1-A start section – part 1 cheepskipper enters/exits water – part 1	
10F	mario goes into water in 1-A start section – part 2 cheepskipper enters/exits water – part 2	
110	mario goes into water in 1-A start section – part 3 spike pillar goes into water – part 1	
111	spike pillar goes into water – part 2	
112		
113	cheepskipper enters/exits water – part 3	
114	mario goes into water in 3-Castle boss room – part 1	
115	mario goes into water in 3-Castle boss room – part 2	
116	mario goes into water in 3-Castle boss room – part 3	
117	mario punches fence – part 1	
118	mario punches fence – part 2	

Special Event IDs

ID	Description
3E	Blue coin trail while event is active.
46	Causes the unused "faded circle" screen transition to be used when using an entrance or exit. **Unused**
F3	Partial Starman effects. **Unused?**
F4	Partial Mega Mushroom effects. **Unused?**
EB	Make inventory contain item with no icon. Crashes when you release the item and it can't be replaced by other items. Maybe defunct unused item? **Unused?**
F7	Locks camera into bottom left of view. Mario isn't forced to be inside this camera, but he can't interact with actors outside the camera. **Unused?**

Staff Roll Characters

These are the letters you can touch on the bottom screen during the credits.

Closest ASCII Character	Character ID	Character Used?	SFX ID	SFX Name	SFX Usage Outside of Credits
A	0x0	Yes	0x34	SE_EMY_KPJR_DAMAGE_V	Bowser Jr. stomped (voice)
B	0x1	Yes	0x35	SE_EMY_KPJR_CRY_V	Bowser Jr. defeated
C	0x2	Yes	0x39	SE_EMY_KPJR_GUARD_ON	Bowser Jr. go into shell
D	0x3	Yes	0x6e	SE_EMY_KURIBO_FUMU	Stomp on enemy / Stomp on other player
E	0x4	Yes	0x6f	SE_EMY_KAME_FUMU	Stomp on Koopa / Kab-omb / Skeeter (?)
F	0x5	Yes	0x70	SE_EMY_KAME_KERU	Enemy defeated by fireball/Shell mario in shell/Ground-pound/Flagpole / Mega Goomba defeated by Mini Player / Hanging ? Block hit from side / Item destroyed in lava / Block spawned by tile creator sprite
G	0x6	Yes	0xf5	SE_VOC_OPDM_YES	Player reacts to completion of logo
H	0x7	Yes	0xfa	SE_VOC_OPDM_AWAWA_01	Player reacts to thunder strike
I	0x8	Yes	0x128	SE_OBJ_GOAL_HANABI	Goal firework
J	0x9	Yes	0x103	SE_AMB_OPDM_BABEL	Logo crashes down
K	0xa	Yes	0x123	SE_OBJ_GET_DRAGON_COIN	Get Star Coin
L	0xb	Yes	0x10b	SE_VOC_OPDM_PEACH_HELP	
M	0xc	Yes	0x166	SE_PLY_CHANGE_NORMAL	Turn back to normal from Mega
N	0xd	Yes	0x14f	SE_PLY_HIP_ATTACK_M	Mini ground-pound

Closest ASCII Character	Character ID	Character Used?	SFX ID	SFX Name	SFX Usage Outside of Credits
O	0xe	Yes	0x149	SE_PLY_JUMP_3	Mini Player jumps
P	0xf	Yes	0x152	SE_PLY_DOWN	Player loses a life
Q	0x10	No	0x153	SE_PLY_SWIM	Player swim
R	0x11	Yes	0x168	SE_PLY_THROW_FIRE	Fire Player/Fire Bros – throw fireball
S	0x12	Yes	0x16c	SE_OBJ_GET_COIN	Get coin
T	0x13	Yes	0x171	SE_OBJ_DOKAN_BREAK	Pipe/Bill Blaster smashed from the side as Mega Player
U	0x14	Yes	0x172	SE_PLY_JUMPDAI	Jump on trampoline/Pot in final boss intro jumps
V	0x15	Yes	0x17b	SE_SYS_ONE_UP	Get 1-up mushroom
W	0x16	Yes	0x17c	SE_SYS_ONE_DOWN	Unused
X	0x17	Yes	0x1a9	SE_OBJ_TSUBO_BREAK	Pot in final boss intro shatters
Y	0x18	Yes	0x1ab	SE_VOC_M_HOEE	Mario embarrassed after being kissed by peach
Z	0x19	Yes	0x1ad	SE_VOC_P_THANK_YOU	Peach thanks Player after battle
a	0x1a	Yes	0x34	SE_EMY_KPJR_DAMAGE_V	Bowser Jr. stomped (voice)
b	0x1b	Yes	0x35	SE_EMY_KPJR_CRY_V	Bowser Jr. defeated
c	0x1c	Yes	0x39	SE_EMY_KPJR_GUARD_ON	Bowser Jr. go into shell
d	0x1d	Yes	0x6e	SE_EMY_KURIBO_FUMU	Stomp on enemy / Stomp on other player
e	0x1e	Yes	0x6f	SE_EMY_KAME_FUMU	Stomp on Koopa / Kab-omb / Skeeter (?)

Closest ASCII Character	Character ID	Character Used?	SFX ID	SFX Name	SFX Usage Outside of Credits
f	0x1f	Yes	0x70	SE_EMY_KAME_KERU	Enemy defeated by fireball/Shell mario in shell/Ground-pound/Flagpole / Mega Goomba defeated by Mini Player / Hanging ? Block hit from side / Item destroyed in lava / Block spawned by tile creator sprite
g	0x20	Yes	0xf5	SE_VOC_OPDM_YES	Player reacts to completion of logo
h	0x21	Yes	0xfa	SE_VOC_OPDM_AWAWA_01	Player reacts to thunder strike
i	0x22	Yes	0x128	SE_OBJ_GOAL_HANABI	Goal firework
j	0x23	Yes	0x103	SE_AMB_OPDM_BABEL	Logo crashes down
k	0x24	Yes	0x123	SE_OBJ_GET_DRAGON_COIN	Get Star Coin
l	0x25	Yes	0x10b	SE_VOC_OPDM_PEACH_HELP	
m	0x26	Yes	0x166	SE_PLY_CHANGE_NORMAL	Turn back to normal from Mega
n	0x27	Yes	0x14f	SE_PLY_HIP_ATTACK_M	Mini ground-pound
o	0x28	Yes	0x149	SE_PLY_JUMP_3	Mini Player jumps
p	0x29	Yes	0x152	SE_PLY_DOWN	Player loses a life
q	0x2a	Yes	0x153	SE_PLY_SWIM	Player swim
r	0x2b	Yes	0x168	SE_PLY_THROW_FIRE	Fire Player/Fire Bros – throw fireball
s	0x2c	Yes	0x16c	SE_OBJ_GET_COIN	Get coin
t	0x2d	Yes	0x171	SE_OBJ_DOKAN_BREAK	Pipe/Bill Blaster smashed from the side as Mega Player
u	0x2e	Yes	0x172	SE_PLY_JUMPDAI	Jump on trampoline/Pot in final boss intro jumps
v	0x2f	Yes	0x17b	SE_SYS_ONE_UP	Get 1-up mushroom
w	0x30	Yes	0x17c	SE_SYS_ONE_DOWN	Unused

Closest ASCII Character	Character ID	Character Used?	SFX ID	SFX Name	SFX Usage Outside of Credits
x	0x31	No	0x1a9	SE_OBJ_TSUBO_BREAK	Pot in final boss intro shatters
y	0x32	Yes	0x1ab	SE_VOC_M_HOEE	Mario embarrassed after being kissed by peach
z	0x33	Yes	0x1ad	SE_VOC_P_THANK_YOU	Peach thanks Player after battle
À	0x34	No	0x36	SE_EMY_KPJR_UH	Bowser Jr. "wakes up" after battle
Á	0x35	No	0x37	SE_EMY_KPJR_LAND	Bowser Jr. land after jump attack
Â	0x36	No	0x3b	SE_EMY_KPJR_GUARD_OFF	Bowser Jr. stop hiding in shell
Ä	0x37	No	0x3c	SE_EMY_KPJR_DAMAGE	Bowser Jr. stomped
Ç	0x38	No	0x3d	SE_EMY_KPJR_PURUPURU	Bowser Jr. shakes head after waking up after battle
È	0x39	No	0x77	SE_EMY_KAME_HIT_7	Defeat 7th and subsequent enemy in a row while sliding
É	0x3a	No	0xf6	SE_VOC_OPDM_UN_01	Player looks up at logo
Ê	0x3b	No	0xfc	SE_VOC_OPDM_AWAWA_02	
Ë	0x3c	No	0xff	SE_VOC_OPDM_HOEE	
Ì	0x3d	No	0x10a	SE_VOC_OPDM_PEACH_CRY	
Í	0x3e	No	0x101	SE_AMB_OPDM_WARBLE	Intro birds
Î	0x3f	No	0x102	SE_AMB_OPDM_THUNDER	Thunder strike on castle
Ï	0x40	No	0x104	SE_EMY_OPDM_KPJR_FOOT	Bowser Jr. sneaks up on peach
Ñ	0x41	No	0x109	SE_PLY_OPDM_MA_HIT	
Ò	0x42	No	0x10d	SE_OBJ_OPDM_NEW_FALL	
Ó	0x43	No	0x10e	SE_OBJ_OPDM_NEW_SET	

Closest ASCII Character	Character ID	Character Used?	SFX ID	SFX Name	SFX Usage Outside of Credits
Ô	0x44	No	0x10f	SE_OBJ_OPDM_LOGO_FALL_L	
Ö	0x45	No	0x110	SE_OBJ_OPDM_LOGO_FALL_S	
Ù	0x46	No	0x170	SE_OBJ_COIN_BOUND	Loose coin hit ground
Ú	0x47	No	0x174	SE_OBJ_ITEM_APPEAR	Item out of block
Û	0x48	No	0x13a	SE_SYS_MID_POINT	Pass checkpoint
Ü	0x49	No	0x13e	SE_SYS_HURRY_UP	
ß	0x4a	No	0x14d	SE_PLY_HIP_ATTACK	Ground-pound hits ground / Ground-pound hits other player
à	0x4b	No	0x36	SE_EMY_KPJR_UH	Bowser Jr. "wakes up" after battle
á	0x4c	No	0x37	SE_EMY_KPJR_LAND	Bowser Jr. land after jump attack
â	0x4d	No	0x3b	SE_EMY_KPJR_GUARD_OFF	Bowser Jr. stop hiding in shell
ä	0x4e	No	0x3c	SE_EMY_KPJR_DAMAGE	Bowser Jr. stomped
ç	0x4f	No	0x3d	SE_EMY_KPJR_PURUPURU	Bowser Jr. shakes head after waking up after battle
è	0x50	No	0x77	SE_EMY_KAME_HIT_7	Defeat 7th and subsequent enemy in a row while sliding
é	0x51	No	0xf6	SE_VOC_OPDM_UN_01	Player looks up at logo
ê	0x52	No	0xfc	SE_VOC_OPDM_AWAWA_02	
ë	0x53	No	0xff	SE_VOC_OPDM_HOEE	
ì	0x54	No	0x10a	SE_VOC_OPDM_PEACH_CRY	
í	0x55	No	0x101	SE_AMB_OPDM_WARBLE	Intro birds
î	0x56	No	0x102	SE_AMB_OPDM_THUNDER	Thunder strike on castle

Closest ASCII Character	Character ID	Character Used?	SFX ID	SFX Name	SFX Usage Outside of Credits
ï	0x57	No	0x104	SE_EMY_OPDM_KPJR_FOOT	Bowser Jr. sneaks up on peach
ñ	0x58	No	0x109	SE_PLY_OPDM_MA_HIT	
ò	0x59	No	0x10d	SE_OBJ_OPDM_NEW_FALL	
ó	0x5a	No	0x10e	SE_OBJ_OPDM_NEW_SET	
ô	0x5b	No	0x10f	SE_OBJ_OPDM_LOGO_FALL_L	
ö	0x5c	No	0x110	SE_OBJ_OPDM_LOGO_FALL_S	
ù	0x5d	No	0x170	SE_OBJ_COIN_BOUND	Loose coin hit ground
ú	0x5e	No	0x174	SE_OBJ_ITEM_APPEAR	Item out of block
û	0x5f	No	0x13a	SE_SYS_MID_POINT	
ü	0x60	No	0x13e	SE_SYS_HURRY_UP	
.	0x61	No	0x15b	SE_PLY_FOOTNOTE_H	
•	0x62	No	0x15e	SE_PLY_FOOTNOTE_H	
_	0x63	No	0x16a	SE_PLY_CHANGE_SMALL	Enter/exit pipe / Enter warp / lose powerup
-	0x64	No	0x163	SE_PLY_CHANGE_BIG	Get powerup / Collect Starman as Mega Player
[another type of line]	0x65	No	0x167	SE_PLY_CHANGE_MAME	Become mini
&	0x66	Yes	0x177	SE_OBJ_BLOCK_BREAK	Player break brick block / boss shutter block spawn/break / block broken by tile destroyer sprite / bridge destroyed in Bowser/Big Bowser boss / peach platform destroyed in final boss / Bob-omb destroy block / Big Unagi destroy block / Mummipokey sand ball break

Closest ASCII Character	Character ID	Character Used?	SFX ID	SFX Name	SFX Usage Outside of Credits
'	0x67	Yes	0x178	SE_PLY_STAR_ATTACK	Mega Player touch enemy/Big Player touch Mini Goomba / Big Unagi destroy block / Broozer destroy block