Pokémon Red/Blue:RAM map

From Data Crystal

The following article is a RAM map for *Pokémon Red and Blue*.

Currently, many more memory addresses can be found in the Pokémon Red disassembly project (WRAM (https://github.com/pret/pokered/blob/master/wram.asm), VRAM (https://github.com/pret/pokered/blob/master/vram.asm), HRAM (https://github.com/pret/pokered/blob/master/hram.asm), SRAM (https://github.com/pret/pokered/blob/master/sram.asm)).

Contents

Saved data (SRAM)

Bank 0

Sprite decompression zone + Hall of Fame

```
A000 – A187 : Sprite buffer #0
A188 – A30F : Sprite buffer #1
A310 – A497 : Sprite buffer #2
```

```
A498 – A597 : Unused ?
```

```
A598 – B857 : Hall Of Fame data
```

```
B858 – BFFF : Unused ?
```

Note : this is the reason Missingno corrupts the HoF data : its invalid sprite, when decompressed, overwrites data past the buffers' boundaries... right into HoF data.

Other Pokémon with even larger corruptions reach WRAM - usually leading to crashes.

Bank 1

```
A000 – A597 : Unused ?
```

```
A598 – A5A2 : Player name
A5A3 – AD2B : Main data
AD2C – AF2B : Sprite data
AF2C – B0BF : Party data
B0C0 – B521 : Current box data
B522        : Tileset type
B523        : Main data checksum
```

```
B524 – BFFF : Unused ?
```

Bank 2

Pokémon boxes 1-6

```
A000 – A461 : Box 1
A462 – A8C3 : Box 2
A8C4 – AD25 : Box 3
AD26 – B187 : Box 4
B188 – B5E9 : Box 5
B5EA – BA4B : Box 6
BA4C        : Global checksum
BA4D – BA52 : Individual checksums
```

```
BA53 – BFFF : Unused
```

Bank 3

Pokémon boxes 7-12

```
A000 – A461 : Box 7
A462 – A8C3 : Box 8
A8C4 – AD25 : Box 9
AD26 – B187 : Box 10
B188 – B5E9 : Box 11
B5EA – BA4B : Box 12
BA4C        : Global checksum
BA4D – BA52 : Individual checksums
```

```
BA53 – BFFF : Unused
```

Main data (WRAM)

Audio

Addresses C000 to C0F2 are used by the sound engine.

```
C002 – Bit 7 : 1 if audio is muted. Other bits : if non-zero, pauses music and continues SFX until it ends.
C0DE – Volumes for all music channels (and fade for those who support it)
C0EF – Current sound bank
C0F0 – Saved sound bank
```

Bytes C0F3 to C0FF are undocumented (if used)

Sprite Data

```
C100 to C1FF : Data for all sprites on the current map
               Holds info for 16 sprites with $10 bytes each
               Note : player is always sprite 0

Replace x with the sprite ID
    C1x0: picture ID (fixed, loaded at map init)
    C1x1: movement status (0: uninitialized, 1: ready, 2: delayed, 3: moving)
    C1x2: sprite image index (changed on update, $ff if off screen, includes facing direction, progress in walking animat
    C1x3: Y screen position delta (-1,0 or 1; added to c1x4 on each walking animation update)
    C1x4: Y screen position (in pixels, always 4 pixels above grid which makes sprites appear to be in the center of a ti
    C1x5: X screen position delta (-1,0 or 1; added to c1x6 on each walking animation update)
    C1x6: X screen position (in pixels, snaps to grid if not currently walking)
    C1x7: intra-animation-frame counter (counting upwards to 4 until c1x8 is incremented)
    C1x8: animation frame counter (increased every 4 updates, hold four states (totalling to 16 walking frames)
    C1x9: facing direction (0: down, 4: up, 8: left, $c: right)
    C1xA to C1xF are unudocumented (if used)
```

```
C200 to C2FF : More data for all sprites on the current map
               Holds info for 16 sprites with $10 bytes each
               Note : player sprite is always sprite 0

   C2x0: walk animation counter (counting from $10 backwards when moving)
   C2x1:
   C2x2: Y displacement (initialized at 8, supposed to keep moving sprites from moving too far, but bugged)
   C2x3: X displacement (initialized at 8, supposed to keep moving sprites from moving too far, but bugged)
   C2x4: Y position (in 2x2 tile grid steps, topmost 2x2 tile has value 4)
   C2x5: X position (in 2x2 tile grid steps, leftmost 2x2 tile has value 4)
   C2x6: movement byte 1 (determines whether a sprite can move, $ff:not moving, $fe:random movements, others unknown)
   C2x7: (?) (set to $80 when in grass, else $0; may be used to draw grass above the sprite)
   C2x8: delay until next movement (counted downwards, status (c1x1) is set to ready if reached 0)
   C2x9 to C2xD are undocumented
   C2xE: sprite image base offset (in video ram, player always has value 1, used to compute c1x2)
   C2xF isn't documented
```

C300 to C39F : OAM DMA buffer (source for the DMA Transfer)

Tile Data

```
C3A0 to C507 : Buffer of all tiles onscreen
C508 to C5CF : Copy of previous buffer (used to restore tiles after closing menus)
```

Menu Data

```
Coordinates of the position of the cursor for the top menu item (id 0)
CC24 : Y position
CC25 : X position
```

```
CC26 - Currently selected menu item (topmost is 0)
CC27 - Tile "hidden" by the menu cursor
CC28 - ID of the last menu item
CC29 - bitmask applied to the key port for the current menu
CC2A - ID of the previously selected menu item
CC2B - Last position of the cursor on the party / Bill's PC screen
CC2C - Last position of the cursor on the item screen
CC2D - Last position of the cursor on the START / battle menu
CC2F - Index (in party) of the Pokémon currently sent out
CC30~CC31 - Pointer to cursor tile in C3A0 buffer
CC36 - ID of the first displayed menu item
CC35 - Item highlighted with Select (01 = first item, 00 = no item, etc.)
```

CC3A and CC3B are unused

Link Data

CC3C to CC49 hold data used for Cable Club stuff

```
The meaning of CC47 depends on the context
CC47 - Link timeout counter
CC47 - Is player entering Cable Club ?
```

Misc.

```
CC97 to CCA0 : buffer for when swapping party Pokémon
```

Battle

```
CCD5 - Number of turns in current battle
CCD6 is undocumented (if used)
CCD7 - Player's Substitute HP
CCD8 - Enemy Substitute HP
CCDB - Move menu type : 0 is regular, 1 is mimic, other are text boxes (learn, PP-refill...)
CCDC - Player-selected move
CCDD - Enemy-selected move
CCE5~CCE7 - Money earned by Pay Day
```

Safari Zone data :

```
CCE8 - Opponent escaping factor
CCE9 - Opponent baiting factor
```

```
CCED - Is current Pokémon disobedient ?
CCEE - Player's disabled move
CCEF - Enemy's disabled move
CCF6 - Is low-health alarm disabled ?
CD05~CD06 - Amount of damage the enemy accumulated while Biding
CD1A - Player's Pokémon Attack modifier (7 means no modifier)
CD1B - Player's Pokémon Defense modifier
CD1C - Player's Pokémon Speed modifier
CD1D - Player's Pokémon Special modifier
CD1E - Player's Pokémon Accuracy modifier
CD1F - Player's Pokémon Evasion modifier
CD2D - Engaged Trainer class / legendary Pokémon ID
CD2E - Engaged Trainer roster ID / Enemy's Pokémon Attack modifier (7 means no modifier)
CD2F - Enemy's Pokémon Defense modifier
CD30 - Enemy's Pokémon Speed modifier
CD31 - Enemy's Pokémon Special modifier
CD32 - Enemy's Pokémon Accuracy modifier
CD33 - Enemy's Pokémon Evasion modifier
```

Joypad simulation

```
CD38 - Index for joypad input simulation. If non-zero, disables collision but does not lock player.
```

Pokémon Mart

```
CF7B - Total Items
CF7C - Item 1
CF7D - Item 2
CF7E - Item 3
CF7F - Item 4
CF80 - Item 5
CF81 - Item 6
CF82 - Item 7
CF83 - Item 8
CF84 - Item 9
CF85 - Item 10
```

Name Rater

```
CF92 - Which Pokémon does Name Rater Change?
```

Battle

```
CFD3 - Your Move Effect (e.g. 10h = coins scatter everywhere)
CFD5 - Your Move Type
```

```
CCDC - Your Move Used
```

```
CFCC - Enemy's Move ID
CFCD - Enemy's Move Effect
CFCE - Enemy's Move Power
CFCF - Enemy's Move Type
CFD0 - Enemy's Move Accuracy
CFD1 - Enemy's Move Max PP
CFD2 - Player's Move ID
CFD3 - Player's Move Effect
CFD4 - Player's Move Power
CFD5 - Player's Move Type
CFD6 - Player's Move Accuracy
CFD7 - Player's Move Max PP
CFD8 - Enemy's Pokémon internal ID
CFD9 - Player's Pokémon internal ID
CFDA-CFE4 - Enemy's Name
CFE5 - Enemy's Pokémon internal ID
CFE6-CFE7 - Enemy's HP
CFE8 - Enemy's Level
CFE9 - Enemy's Status
        Bit 6 : Paralyzed
        Bit 5 : Frozen
        Bit 4 : Burned
        Bit 3 : Poisoned
        Bits 0-2 : Sleep counter
CFEA - Enemy's Type 1
CFEB - Enemy's Type 2
CFEC - Enemy's Catch Rate (Unused, only referenced by Transform script, the one actually used is at D007)
CFED - Enemy's Move 1
CFEE - Enemy's Move 2
CFEF - Enemy's Move 3
CFF0 - Enemy's Move 4
CFF1 - Enemy's Attack and Defense DVs
CFF2 - Enemy's Speed and Special DVs
CFF3 - Enemy's Level
CFF4-CFF5 - Enemy's Max HP
CFF6-CFF7 - Enemy's Attack
CFF8-CFF9 - Enemy's Defense
CFFA-CFFB - Enemy's Speed
CFFC-CFFD - Enemy's Special
CFFE - Enemy's PP (First Slot)
CFFF - Enemy's PP (Second Slot)
D000 - Enemy's PP (Third Slot)
D001 - Enemy's PP (Fourth Slot)
D002-D006 - Enemy's Base Stats
D007 - Enemy's Catch Rate
D008 - Enemy's Base Experience
```

Pokémon 1st Slot (In-Battle)

```
D009-D013 - Name
D014 - Pokémon Number
D015-D016 - Current HP
D017 -
D018 - Status
        Bit 6 : Paralyzed
        Bit 5 : Frozen
        Bit 4 : Burned
        Bit 3 : Poisoned
        Bits 0-2 : Sleep counter
D019 - Type 1
D01A - Type 2
D01B -
D01C - Move #1 (First Slot)
D01D - Move #2 (Second Slot)
D01E - Move #3 (Third Slot)
D01F - Move #4 (Fourth Slot)
D020 - Attack and Defense DVs
D021 - Speed and Special DVs
D022 - Level
D023-D024 - Max HP
D025-D026 - Attack
D027-D028 - Defense
```

```
D029-D02A - Speed
D02B-D02C - Special
D02D - PP (First Slot)
D02E - PP (Second Slot)
D02F - PP (Third Slot)
D030 - PP (Fourth Slot)
```

```
D057 - Type of battle
```

```
D05A - Battle Type (Normal battle, Safari Zone, Old Man battle...)
```

```
D05C - Is Gym Leader battle music playing?
D05D -
D05E - Critical Hit / OHKO Flag
       01 - Critical Hit!
       02 - One-hit KO!
D05F - Hooked Pokémon Flag
```

```
D062-D064 - Battle Status (Player)
          D062:
            bit 0 - Bide
            bit 1 - Thrash / petal dance
            bit 2 - Attacking multiple times (e.g. double kick)
            bit 3 - Flinch
            bit 4 - Charging up for attack
            bit 5 - Using multi-turn move (e.g. wrap)
            bit 6 - Invulnerable to normal attack (using fly/dig)
            bit 7 - Confusion
          D063:
            bit 0 - X Accuracy effect
            bit 1 - protected by "mist"
            bit 2 - focus energy effect
            bit 4 - has a substitute
            bit 5 - need to recharge
            bit 6 - rage
            bit 7 - leech seeded
          D064:
            bit 0 - toxic
            bit 1 - light screen
            bit 2 - reflect
            bit 3 - tranformed
D065 - Stat to double (CPU)
D066 - Stat to halve (CPU)
D067-D069 - Battle Status (CPU) - Includes the "Transformed" status in D069 which makes the game regard the opponent as a
D06A - Multi-Hit Move counter (Player)
D06B - Confusion counter (Player)
D06C - Toxic counter (Player)
D06D-D06E - Disable counter (Player)
D06F - Multi-Hit Move counter (CPU)
D070 - Confusion counter (CPU)
D071 - Toxic counter (CPU)
D072 - Disable counter (CPU)
```

```
D0D8 - Amount of damage attack is about to do. Max possible damage may appear one frame before actual damage.
```

Game Corner

```
D13D - 1st Game Corner Prize
D13E - 2nd Game Corner Prize
D13F - 3rd Game Corner Prize
```

Link Battle PRNG

```
D148–D150 – 9 Pseudo-Random Numbers used during Link Battles. Once a batch is used up, it generates a new batch with n ×
```

Player

```
D158–D162 – Your Name
```

```
D163 – # Pokémon In Party
D164 – Pokémon 1
D165 – Pokémon 2
D166 – Pokémon 3
D167 – Pokémon 4
D168 – Pokémon 5
D169 – Pokémon 6
D16A – End of list
```

Pokémon 1

```
D16B – Pokémon (Again)
D16C–D16D – Current HP
D16E – 'Level' (not the actual level, see the notes article)
D16F – Status (Poisoned, Paralyzed, etc.)
D170 – Type 1
D171 – Type 2
D172 – Catch rate/Held item (When traded to Generation II)
D173 – Move 1
D174 – Move 2
D175 – Move 3
D176 – Move 4
D177–D178 – Trainer ID
D179–D17B – Experience
D17C–D17D – HP EV
D17E–D17F – Attack EV
D180–D181 – Defense EV
D182–D183 – Speed EV
D184–D185 – Special EV
D186 – Attack/Defense IV
D187 – Speed/Special IV
D188 – PP Move 1
D189 – PP Move 2
D18A – PP Move 3
D18B – PP Move 4
D18C – Level (actual level)
D18D–D18E – Max HP
D18F–D190 – Attack
D191–D192 – Defense
D193–D194 – Speed
D195–D196 – Special
```

Pokémon 2

```
D197 – Pokémon
D198–D199 – Current HP
D19A – 'Level' (not the actual level, see the notes article)
D19B – Status
D19C – Type 1
D19D – Type 2
D19E – Catch rate/Held item (When traded to Generation II)
D19F – Move 1
D1A0 – Move 2
D1A1 – Move 3
D1A2 – Move 4
D1A3–D1A4 – Trainer ID
D1A5–D1A7 – Experience
D1A8–D1A9 – HP EV
D1AA–D1AB – Attack EV
D1AC–D1AD – Defense EV
D1AE–D1AF – Speed EV
```

```
D1B0–D1B1 – Special EV
D1B2 – Attack/Defense IV
D1B3 – Speed/Special IV
D1B4 – PP Move 1
D1B5 – PP Move 2
D1B6 – PP Move 3
D1B7 – PP Move 4
D1B8 – Level (actual)
D1B9–D1BA – Max HP
D1BB–D1BC – Attack
D1BD–D1BE – Defense
D1BF–D1C0 – Speed
D1C1–D1C2 – Special
```

Pokémon 3

```
D1C3 – Pokémon
D1C4–D1C5 – Current HP
D1C6 – 'Level' (not the actual level, see the notes article)
D1C7 – Status
D1C8 – Type 1
D1C9 – Type 2
D1CA – Catch rate/Held item (When traded to Generation II)
D1CB – Move 1
D1CC – Move 2
D1CD – Move 3
D1CE – Move 4
D1CF–D1D0 – Trainer ID
D1D1–D1D3 – Experience
D1D4–D1D5 – HP EV
D1D6–D1D7 – Attack EV
D1D8–D1D9 – Defense EV
D1DA–D1DB – Speed EV
D1DC–D1DD – Special EV
D1DE – Attack/Defense IV
D1DF – Speed/Special IV
D1E0 – PP Move 1
D1E1 – PP Move 2
D1E2 – PP Move 3
D1E3 – PP Move 4
D1E4 – Level
D1E5–D1E6 – Max HP
D1E7–D1E8 – Attack
D1E9–D1EA – Defense
D1EB–D1EC – Speed
D1ED–D1EE – Special
```

Pokémon 4

```
D1EF – Pokémon
D1F0–D1F1 – Current HP
D1F2 – 'Level' (not the actual level, see the notes article)
D1F3 – Status
D1F4 – Type 1
D1F5 – Type 2
D1F6 – Catch rate/Held item (When traded to Generation II)
D1F7 – Move 1
D1F8 – Move 2
D1F9 – Move 3
D1FA – Move 4
D1FB–D1FC – Trainer ID
D1FD–D1FF – Experience
D200–D201 – HP EV
D202–D203 – Attack EV
D204–D205 – Defense EV
D206–D207 – Speed EV
D208–D209 – Special EV
D20A – Attack/Defense IV
D20B – Speed/Special IV
D20C – PP Move 1
D20D – PP Move 2
D20E – PP Move 3
D20F – PP Move 4
```

```
D210 - Level
D211-D212 - Max HP
D213-D214 - Attack
D215-D216 - Defense
D217-D218 - Speed
D219-D21A - Special
```

Pokémon 5

```
D21B - Pokémon
D21C-D21D - Current HP
D21E - 'Level' (not the actual level, see the notes article)
D21F - Status
D220 - Type 1
D221 - Type 2
D222 - Catch rate/Held item (When traded to Generation II)
D223 - Move 1
D224 - Move 2
D225 - Move 3
D226 - Move 4
D227-D228 - Trainer ID
D229-D22B - Experience
D22C-D22D - HP EV
D22E-D22F - Attack EV
D230-D231 - Defense EV
D232-D233 - Speed EV
D234-D235 - Special EV
D236 - Attack/Defense IV
D237 - Speed/Special IV
D238 - PP Move 1
D239 - PP Move 2
D23A - PP Move 3
D23B - PP Move 4
D23C - Level
D23D-D23E - Max HP
D23F-D240 - Attack
D241-D242 - Defense
D243-D244 - Speed
D245-D246 - Special
```

Pokémon 6

```
D247 - Pokémon
D248-D249 - Current HP
D24A - 'Level' (not the actual level, see the notes article)
D24B - Status
D24C - Type 1
D24D - Type 2
D24E - Catch rate/Held item (When traded to Generation II)
D24F - Move 1
D250 - Move 2
D251 - Move 3
D252 - Move 4
D253-D254 - Trainer ID
D255-D257 - Experience
D258-D259 - HP EV
D25A-D25B - Attack EV
D25C-D25D - Defense EV
D25E-D25F - Speed EV
D260-D261 - Special EV
D262 - Attack/Defense IV
D263 - Speed/Special IV
D264 - PP Move 1
D265 - PP Move 2
D266 - PP Move 3
D267 - PP Move 4
D268 - Level
D269-D26A - Max HP
D26B-D26C - Attack
D26D-D26E - Defense
D26F-D270 - Speed
D271-D272 - Special
```

Trainer Name

```
D273-D27D - Trainer name for 1st
D27E-D288 - Trainer name for 2nd
D289-D293 - Trainer name for 3rd
D294-D29E - Trainer name for 4th
D29F-D2A9 - Trainer name for 5th
D2AA-D2B4 - Trainer name for 6th
```

Nickname

```
D2B5-D2BF - Nickname for 1st
D2C0-D2CA - Nickname for 2nd
D2CB-D2D5 - Nickname for 3rd
D2D6-D2E0 - Nickname for 4th
D2E1-D2EB - Nickname for 5th
D2EC-D2F6 - Nickname for 6th
```

Pokedex

D2F7 - Own 1-8
D2F8 - Own 9-16
D2F9 - Own 17-24
D2FA - Own 25-32
D2FB - Own 33-40
D2FC - Own 41-48
D2FD - Own 49-56
D2FE - Own 57-64
D2FF - Own 65-72
D300 - Own 73-80
D301 - Own 81-88
D302 - Own 89-96
D303 - Own 97-104
D304 - Own 105-112
D305 - Own 113-120
D306 - Own 121-128
D307 - Own 129-136
D308 - Own 137-144
D309 - Own 145-152
D30A - Seen 1-8
D30B - Seen 9-16
D30C - Seen 17-24
D30D - Seen 25-32
D30E - Seen 33-40
D30F - Seen 41-48
D310 - Seen 49-56
D311 - Seen 57-64
D312 - Seen 65-72
D313 - Seen 73-80
D314 - Seen 81-88
D315 - Seen 89-96
D316 - Seen 97-104
D317 - Seen 105-112
D318 - Seen 113-120
D319 - Seen 121-128
D31A - Seen 129-136
D31B - Seen 137-144

D31C - Seen 145-152

Items

D31D - Total Items
D31E - Item 1
D31F - Item 1 Quantity
D320 - Item 2
D321 - Item 2 Quantity
D322 - Item 3
D323 - Item 3 Quantity
D324 - Item 4
D325 - Item 4 Quantity
D326 - Item 5
D327 - Item 5 Quantity
D328 - Item 6
D329 - Item 6 Quantity
D32A - Item 7
D32B - Item 7 Quantity
D32C - Item 8
D32D - Item 8 Quantity
D32E - Item 9
D32F - Item 9 Quantity
D330 - Item 10
D331 - Item 10 Quantity
D332 - Item 11
D333 - Item 11 Quantity
D334 - Item 12
D335 - Item 12 Quantity
D336 - Item 13
D337 - Item 13 Quantity
D338 - Item 14
D339 - Item 14 Quantity
D33A - Item 15
D33B - Item 15 Quantity
D33C - Item 16
D33D - Item 16 Quantity
D33E - Item 17
D33F - Item 17 Quantity
D340 - Item 18
D341 - Item 18 Quantity
D342 - Item 19
D343 - Item 19 Quantity
D344 - Item 20
D345 - Item 20 Quantity
D346 - Item End of List

Money

D347 - Money Byte 1
D348 - Money Byte 2
D349 - Money Byte 3

Rival

D34A-D351 - Rival's Name

Miscellaneous

D355 - Options

Bit 7 = Battle Animation (1 = Off, 0 = On)
Bit 6 = Battle Style (1 = Set, 0 = Shift)
Bit 5-4 = probably unused
Low Nybble = Text Speed (0x0 = fastest, 0xF = slowest)

Fast = 1
Medium = 3
Slow = 5

D356 = Badges (Binary Switches)

D358 = If bit0 = 0, delay is limited to 1 frame between each letter. If bit1 = 0, no delay during text printing. Overrides previous setting.

D359 = Player ID [1] (Multiple of 256) D35A = Player ID [2] (...+1-255)

D35B = Audio track (See Audio section) D35C = Audio bank (See Audio section)

D35D = Controls the map's palette. Usually 0, but is set to 6 when Flash is required.

D35E = Current Map Number

D35F-D360 = Event Displacement (view Notes, for more info)
D361 - 1 byte integer = Current Player Y-Position
D362 - 1 byte integer = Current Player X-Position
D363 = Current Player Y-Position (Current Block)
D364 = Current Player X-Position (Current Block)

D365 = Last map location for walking through certain exits (e.g. Safari Zone gate)

Audio

C022 = Audio track channel 1

C023 = Audio track channel 2

C024 = Audio track channel 3

C025 = Audio track channel 4

C0E8, C0E9 = Music tempo (lower values in C0E9 may = faster except for particularly low values)

C0EA, C0EB = Sound effects tempo

C0EC, C0ED = Sound effects header pointer

C0EE = New sound ID

C0EF = Audio bank

C0F0 = Audio bank

D35B = Audio track in current map

D35C = Audio bank in current map

    Bank 02

        B3 = Validate
        B4 = Bump
        B5 = Exit of a house
        B6 = Save Game
        B8 = Pokéflute
        B9 = Ding Dong
        BA = PalletTown
        BD = Pokecenter
        C0 = Gym
        C3 = Viridian City, Pewter City, Saffron City
        C7 = Cerulean City, Fuchsia City
        CA = Celadon City
        CD = Cinnabar City
        D0 = Vermilion City
        D4 = Lavender Town
        D8 = SS Anne
        DB = Meet Oak
        DE = Meet Blue
        E1 = Follow me
        E5 = Safari Zone / Evolution
        E8 = Pokémon Healding
        EB = Road 1, 2
        EF = Road 24, 25
        F3 = Road 3, 4, 5, 6, 7, 8, 9, 10, 16, 17, 18, 19, 20, 21, 22
        F7 = Road 11, 12, 13, 14, 15
        FB = Indigo Plateau

    Bank 08

        EA = Gym Leader Battle
        ED = Trainer Battle
        F0 = Wild Battle
        F3 = Final Battle
        F6 = Defeated Trainer
        F9 = Defeated Wild Pokemon
        FC = Defeated Champion / Gym

    Bank 1F

        C3 = Title Screen
        C7 = Credits
        CA = Hall of fame
        CD = Oak's Lab
        D0 = Jigglypuff Song
        D2 = Bike Riding
        D6 = Surfing
        D9 = Came Corner
        DC = Intro Game
        DF = Power Plant, Unknown Dungeon, Rocket HQ
        E3 = Viridian Forest, Seafoam Islands
        E7 = Mt. Moon, Rock Tunnel, Victory Road

EB = Cinnabar City Mansion
EF = Pokemon Tower
F2 = Silph Co.
F5 = Eye contact Evil Trainer
F8 = Eye contact Female Trainer
FB = Eye contact Male Trainer
FF = Stop Sound

Map Header

D367 - 1 byte integer = Map's Tileset, 1 byte
D368 - 1 byte integer = Map's Height (Blocks)
D369 - 1 byte integer = Map's Width (Blocks)
D36A-D36B = Map's Data
D36C-D36D = Map's Text Pointer Table (For Each NPC) Location
D36E-D36F = Map's Level-Script Pointer
D370 = Map's Connection Byte
D371-D37B = Map's 1st Connection Data
D37C-D386 = Map's 2nd Connection Data
D387-D391 = Map's 3rd Connection Data
D392-D39C = Map's 4th Connection Data

Tileset Header

D52B = Tileset Bank
D52C-D52D = Pointer to Blocks
D52E-D52F = Pointer to GFX
D530-D531 = Pointer to Collision Data
D532-D534 = "Talking-Over" Tiles
D535 = Grass Tile

Tile graphics

Tiles are 8x8 pixels, stored in 16 bytes, with each byte representing 4 pixels.

For size comparison, the player is 16x16 pixels, therefore, 4 tiles.

"Active" tiles are stored sequentially in RAM, starting at address 0x8000. From address 0x8000 to 0x9000 there are 256 tiles which make up the player in all orientations, and some commonly used stuff. The real map tiles are from 0x9000 to 0x9600.

8000 - 16 byte tile graphic struct = tile 0 (often the top left player tile)
8010 - 16 byte tile graphic struct = tile 1 (often the top right player tile)
8020 - 16 byte tile graphic struct = tile 2 (often the bottom left player tile)

...

9000 - 16 byte tile graphic struct = map tile 0 (often blank)
9010 - 16 byte tile graphic struct = map tile 1
9020 - 16 byte tile graphic struct = map tile 2

...

Stored Items

D53A - Total items in storage
D53B - Stored Item 1
D53C - Stored Item 1 Quantity
D53D - Stored Item 2
D53E - Stored Item 2 Quantity
D53F - Stored Item 3
D540 - Stored Item 3 Quantity
D541 - Stored Item 4
D542 - Stored Item 4 Quantity
D543 - Stored Item 5
D544 - Stored Item 5 Quantity
D545 - Stored Item 6
D546 - Stored Item 6 Quantity
D547 - Stored Item 7
D548 - Stored Item 7 Quantity
D549 - Stored Item 8
D54A - Stored Item 8 Quantity
D54B - Stored Item 9
D54C - Stored Item 9 Quantity
D54D - Stored Item 10
D54E - Stored Item 10 Quantity
D54F - Stored Item 11
D550 - Stored Item 11 Quantity
D551 - Stored Item 12
D552 - Stored Item 12 Quantity
D553 - Stored Item 13
D554 - Stored Item 13 Quantity
D555 - Stored Item 14
D556 - Stored Item 14 Quantity
D557 - Stored Item 15
D558 - Stored Item 15 Quantity
D559 - Stored Item 16
D55A - Stored Item 16 Quantity
D55B - Stored Item 17
D55C - Stored Item 17 Quantity
D55D - Stored Item 18
D55E - Stored Item 18 Quantity
D55F - Stored Item 19
D560 - Stored Item 19 Quantity
D561 - Stored Item 20
D562 - Stored Item 20 Quantity
D563 - Stored Item 21
D564 - Stored Item 21 Quantity
D565 - Stored Item 22
D566 - Stored Item 22 Quantity
D567 - Stored Item 23
D568 - Stored Item 23 Quantity
D569 - Stored Item 24
D56A - Stored Item 24 Quantity
D56B - Stored Item 25
D56C - Stored Item 25 Quantity
D56D - Stored Item 26
D56E - Stored Item 26 Quantity
D56F - Stored Item 27
D570 - Stored Item 27 Quantity
D571 - Stored Item 28

D572 - Stored Item 28 Quantity
D573 - Stored Item 29
D574 - Stored Item 29 Quantity
D575 - Stored Item 30
D576 - Stored Item 30 Quantity
D577 - Stored Item 31
D578 - Stored Item 31 Quantity
D579 - Stored Item 32
D57A - Stored Item 32 Quantity
D57B - Stored Item 33
D57C - Stored Item 33 Quantity
D57D - Stored Item 34
D57E - Stored Item 34 Quantity
D57F - Stored Item 35
D580 - Stored Item 35 Quantity
D581 - Stored Item 36
D582 - Stored Item 36 Quantity
D583 - Stored Item 37
D584 - Stored Item 37 Quantity
D585 - Stored Item 38
D586 - Stored Item 38 Quantity
D587 - Stored Item 39
D588 - Stored Item 39 Quantity
D589 - Stored Item 40
D58A - Stored Item 40 Quantity
D58B - Stored Item 41
D58C - Stored Item 41 Quantity
D58D - Stored Item 42
D58E - Stored Item 42 Quantity
D58F - Stored Item 43
D590 - Stored Item 43 Quantity
D591 - Stored Item 44
D592 - Stored Item 44 Quantity
D593 - Stored Item 45
D594 - Stored Item 45 Quantity
D595 - Stored Item 46
D596 - Stored Item 46 Quantity
D597 - Stored Item 47
D598 - Stored Item 47 Quantity
D599 - Stored Item 48
D59A - Stored Item 48 Quantity
D59B - Stored Item 49
D59C - Stored Item 49 Quantity
D59D - Stored Item 50
D59E - Stored Item 50 Quantity
D59F - Stored Items End of List

Game Coins

D5A4 - Casino Chips Byte 1
D5A5 - Casino Chips Byte 2

Event Flags

D5A6 to D5C5 : Missable Objects Flags (flags for every (dis)appearing sprites, like the guard in Cerulean City or the Pokéballs in Oak's Lab)

D5AB - Starters Back?

D5C0(bit 1) - 0=Mewtwo appears, 1=Doesn't (See D85F)

D5F3 - Have Town map?

D60D - Have Oak's Parcel?

D700 - Bike Speed

      D70B - Fly Anywhere Byte 1
      D70C - Fly Anywhere Byte 2

      D70D - Safari Zone Time Byte 1
      D70E - Safari Zone Time Byte 2

D710 - Fossilized Pokémon?

D714 - Position in Air

D72E - Did you get Lapras Yet?

D732 - Debug New Game

D751 - Fought Giovanni Yet?

D755 - Fought Brock Yet?

D75E - Fought Misty Yet?

D773 - Fought Lt. Surge Yet?

D77C - Fought Erika Yet?

D782 - Fought Articuno Yet?

D790 - If bit 7 is set, Safari Game over

D792 - Fought Koga Yet?

D79A - Fought Blaine Yet?

D7B3 - Fought Sabrina Yet?

D7D4 - Fought Zapdos Yet?

D7D8 - Fought Snorlax Yet (Vermilion)

D7E0 - Fought Snorlax Yet? (Celadon)

D7EE - Fought Moltres Yet?

D803 - Is SS Anne here?

D85F - Mewtwo can be caught if bit 2 clear - Needs D5C0 bit 1 clear, too

Wild Pokémon

D887 - Wild Pokémon encounter rates

Common Battles:

        D888 - Level of Encounter 1
        D889 - Pokémon Data Value 1
        D88A - Level of Encounter 2
        D88B - Pokémon Data Value 2
        D88C - Level of Encounter 3
        D88D - Pokémon Data Value 3
        D88E - Level of Encounter 4
        D88F - Pokémon Data Value 4

Uncommon Battles:

        D890 - Level of Encounter 1
        D891 - Pokémon Data Value 1
        D892 - Level of Encounter 2
        D893 - Pokémon Data Value 2
        D894 - Level of Encounter 3
        D895 - Pokémon Data Value 3
        D896 - Level of Encounter 4
        D897 - Pokémon Data Value 4

Rare Battles:

        D898 - Level of Encounter 1
        D899 - Pokémon Data Value 1
        D89A - Level of Encounter 2
        D89B - Pokémon Data Value 2

Opponent Trainer's Pokémon

        D89C - Total enemy Pokémon
        D89D - Pokémon 1
        D89E - Pokémon 2
        D89F - Pokémon 3
        D8A0 - Pokémon 4
        D8A1 - Pokémon 5
        D8A2 - Pokémon 6
        D8A3 - End of list

Pokémon 1

        D8A4 - Pokémon
        D8A5-D8A6 - Current HP
        D8A7 -
        D8A8 - Status
        D8A9 - Type 1
        D8AA - Type 2
        D8AB -
        D8AC - Move 1
        D8AD - Move 2
        D8AE - Move 3
        D8AF - Move 4
        D8B0-D8B1 - Trainer ID
        D8B2-D8B4 - Experience

D8B5-D8B6 - HP EV
D8B7-D8B8 - Attack EV
D8B9-D8BA - Defense EV
D8BB-D8BC - Speed EV
D8BD-D8BE - Special EV
D8BF - Attack/Defense IV
D8C0 - Speed/Special IV
D8C1 - PP Move 1
D8C2 - PP Move 2
D8C3 - PP Move 3
D8C4 - PP Move 4
D8C5 - Level
D8C6-D8C7 - Max HP
D8C8-D8C9 - Attack
D8CA-D8CB - Defense
D8CC-D8CD - Speed
D8CE-D8CF - Special

Pokémon 2

D8D0 - Pokémon
D8D1-D8D2 - Current HP
D8D3 -
D8D4 - Status
D8D5 - Type 1
D8D6 - Type 2
D8D7 -
D8D8 - Move 1
D8D9 - Move 2
D8DA - Move 3
D8DB - Move 4
D8DC-D8DD - Trainer ID
D8DE-D8E0 - Experience
D8E1-D8E2 - HP EV
D8E3-D8E4 - Attack EV
D8E5-D8E6 - Defense EV
D8E7-D8E8 - Speed EV
D8E9-D8EA - Special EV
D8EB - Attack/Defense IV
D8EC - Speed/Special IV
D8ED - PP Move 1
D8EE - PP Move 2
D8EF - PP Move 3
D8F0 - PP Move 4
D8F1 - Level
D8F2-D8F3 - Max HP
D8F4-D8F5 - Attack
D8F6-D8F7 - Defense
D8F8-D8F9 - Speed
D8FA-D8FB - Special

Pokémon 3

D8FC - Pokémon
D8FD-D8FE - Current HP
D8FF -
D900 - Status

```
D901 - Type 1
D902 - Type 2
D903 -
D904 - Move 1
D905 - Move 2
D906 - Move 3
D907 - Move 4
D908-D909 - Trainer ID
D90A-D90C - Experience
D90D-D90E - HP EV
D90F-D910 - Attack EV
D911-D912 - Defense EV
D913-D914 - Speed EV
D915-D916 - Special EV
D917 - Attack/Defense IV
D918 - Speed/Special IV
D919 - PP Move 1
D91A - PP Move 2
D91B - PP Move 3
D91C - PP Move 4
D91D - Level
D91E-D91F - Max HP
D920-D921 - Attack
D922-D923 - Defense
D924-D925 - Speed
D926-D927 - Special
```

Pokémon 4

```
D928 - Pokémon
D929-D92A - Current HP
D92B -
D92C - Status
D92D - Type 1
D92E - Type 2
D92F -
D930 - Move 1
D931 - Move 2
D932 - Move 3
D933 - Move 4
D934-D935 - Trainer ID
D936-D938 - Experience
D939-D93A - HP EV
D93B-D93C - Attack EV
D93D-D93E - Defense EV
D93F-D940 - Speed EV
D941-D942 - Special EV
D943 - Attack/Defense IV
D944 - Speed/Special IV
D945 - PP Move 1
D946 - PP Move 2
D947 - PP Move 3
D948 - PP Move 4
D949 - Level
D94A-D94B - Max HP
D94C-D94D - Attack
```

D94E-D94F - Defense
D950-D951 - Speed
D952-D953 - Special

Pokémon 5

D954 - Pokémon
D955-D956 - Current HP
D957 -
D958 - Status
D959 - Type 1
D95A - Type 2
D95B -
D95C - Move 1
D95D - Move 2
D95E - Move 3
D95F - Move 4
D960-D961 - Trainer ID
D962-D964 - Experience
D965-D966 - HP EV
D967-D968 - Attack EV
D969-D96A - Defense EV
D96B-D96C - Speed EV
D96D-D96E - Special EV
D96F - Attack/Defense IV
D970 - Speed/Special IV
D971 - PP Move 1
D972 - PP Move 2
D973 - PP Move 3
D974 - PP Move 4
D975 - Level
D976-D977 - Max HP
D978-D979 - Attack
D97A-D97B - Defense
D97C-D97D - Speed
D97E-D97F - Special

Pokémon 6

D980 - Pokémon
D981-D982 - Current HP
D983 -
D984 - Status
D985 - Type 1
D986 - Type 2
D987 -
D988 - Move 1
D989 - Move 2
D98A - Move 3
D98B - Move 4
D98C-D98D - Trainer ID
D98E-D990 - Experience
D991-D992 - HP EV
D993-D994 - Attack EV
D995-D996 - Defense EV
D997-D998 - Speed EV
D999-D99A - Special EV

D99B - Attack/Defense IV
D99C - Speed/Special IV
D99D - PP Move 1
D99E - PP Move 2
D99F - PP Move 3
D9A0 - PP Move 4
D9A1 - Level
D9A2-D9A3 - Max HP
D9A4-D9A5 - Attack
D9A6-D9A7 - Defense
D9A8-D9A9 - Speed
D9AA-D9AB - Special

Trainer Name

D9AC-D9B6 - Trainer name for 1st
D9B7-D9C1 - Trainer name for 2nd
D9C2-D9CC - Trainer name for 3rd
D9CD-D9D7 - Trainer name for 4th
D9D8-D9E2 - Trainer name for 5th
D9E3-D9ED - Trainer name for 6th

Nickname

D9EE-D9F8 - Nickname for 1st
D9F9-DA03 - Nickname for 2nd
DA04-DA0E - Nickname for 3rd
DA0F-DA19 - Nickname for 4th
DA1A-DA24 - Nickname for 5th
DA25-DA2F - Nickname for 6th

Etc.

Game Time

DA40 - Hours, two bytes
DA42 - Minutes, two bytes
DA44 - Seconds, one byte
DA45 - Frames, one byte

DA47 - Safari Balls

Stored Pokémon

This is for the current box that's in use.

DA80 - Number of Pokémon in current box
DA81-CA94 - Pokémon 1-20
DA95 - End of list

Pokémon 1

DA96 - Pokémon
DA97-DA98 - HP
DA99 - Level
DA9A - Status

DA9B-DA9C - Types
DA9D - Held Item (When traded to Generation II)
DA9E-DAA1 - Moves
DAA2-DAA3 - Trainer ID
DAA4-DAA6 - Experience
DAA7-DAA8 - HP EV
DAA9-DAAA - Attack EV
DAAB-DAAC - Defense EV
DAAD-DAAE - Speed EV
DAAF-DAB0 - Special EV
DAB1 - Attack/Defense IV
DAB2 - Speed/Special IV
DAB3-DAB6 - PP Moves

Pokémon 2

DAB7 - Pokémon
DAB8-DAB9 - HP
DABA - Level
DABB - Status
DABC-DABD - Types
DABE - Held Item (When traded to Generation II)
DABF-DAC2 - Moves
DAC2-DAC4 - Trainer ID
DAC4-DAC7 - Experience
DAC8-DAC9 - HP EV
DACA-DACB - Attack EV
DACC-DACD - Defense EV
DACE-DACF - Speed EV
DAD0-DAD1 - Special EV
DAD2 - Attack/Defense IV
DAD3 - Speed/Special IV
DAD4-DAD7 - PP Moves

Pokémon 3

DAD8 - Pokémon
DAD9-DADA - HP
DADB - Level
DADC - Status
DADD-DADE - Types
DADF - Held Item (When traded to Generation II)
DAE0-DAE3 - Moves
DAE4-DAE5 - Trainer ID
DAE6-DAE8 - Experience
DAE9-DAEA - HP EV
DAEB-DAEC - Attack EV
DAED-DAEE - Defense EV
DAEF-DAF0 - Speed EV
DAF1-DAF2 - Special EV
DAF3 - Attack/Defense IV
DAF4 - Speed/Special IV
DAF5-DAF8 - PP Moves

Pokémon 4

DAF9 - Pokémon

DAFA-DAFB - HP
DAFC - Level
DAFD - Status
DAFE-DAFF - Types
DB00 - Held Item (When traded to Generation II)
DB01-DB04 - Moves
DB05-DB06 - Trainer ID
DB07-DB09 - Experience
DB0A-DB0B - HP EV
DB0C-DB0D - Attack EV
DB0E-DB0F - Defense EV
DB10-DB11 - Speed EV
DB12-DB13 - Special EV
DB14 - Attack/Defense IV
DB15 - Speed/Special IV
DB16-DB19 - PP Moves

Pokémon 5

DB1A - Pokémon
DB1B-DB1C - HP
DB1D - Level
DB1E - Status
DB1F-DB20 - Types
DB21 - Held Item (When traded to Generation II)
DB22-DB25 - Moves
DB26-DB27 - Trainer ID
DB28-DB2A - Experience
DB2B-DB2C - HP EV
DB2D-DB2E - Attack EV
DB2F-DB30 - Defense EV
DB31-DB32 - Speed EV
DB33-DB34 - Special EV
DB35 - Attack/Defense IV
DB36 - Speed/Special IV
DB37-DB3A - PP Moves

Pokémon 6

DB3B - Pokémon
DB3C-DB3D - HP
DB3E - Level
DB3F - Status
DB40-DB41 - Types
DB42 - Held Item (When traded to Generation II)
DB43-DB46 - Moves
DB47-DB48 - Trainer ID
DB4A-DB4B - Experience
DB4C-DB4D - HP EV
DB4E-DB4F - Attack EV
DB50-DB51 - Defense EV
DB52-DB53 - Speed EV
DB54-DB55 - Special EV
DB56 - Attack/Defense IV
DB57 - Speed/Special IV
DB58-DB5B - PP Moves

Pokémon 7

        DB5C - Pokémon
        DB5D-DB5E - HP
        DB5F - Level
        DB60 - Status
        DB61-DB62 - Types
        DB63 - Held Item (When traded to Generation II)
        DB64-DB67 - Moves
        DB68-DB69 - Trainer ID
        DB6A-DB6C - Experience
        DB6D-DB6E - HP EV
        DB6F-DB70 - Attack EV
        DB71-DB72 - Defense EV
        DB73-DB74 - Speed EV
        DB75-DB76 - Special EV
        DB77 - Attack/Defense IV
        DB78 - Speed/Special IV
        DB79-DB7C - PP Moves

Pokémon 8

        DB7D - Pokémon
        DB7E-DB7F - HP
        DB80 - Level
        DB81 - Status
        DB82-DB83 - Types
        DB84 - Held Item (When traded to Generation II)
        DB85-DB88 - Moves
        DB89-DB8A - Trainer ID
        DB8B-DB8D - Experience
        DB8E-DB8F - HP EV
        DB90-DB91 - Attack EV
        DB92-DB93 - Defense EV
        DB94-DB95 - Speed EV
        DB96-DB97 - Special EV
        DB98 - Attack/Defense IV
        DB99 - Speed/Special IV
        DB9A-DB9D - PP Moves

Pokémon 9

        DB9E - Pokémon
        DB9F-DBA0 - HP
        DBA1 - Level
        DBA2 - Status
        DBA3-DBA4 - Types
        DBA5 - Held Item (When traded to Generation II)
        DBA6-DBA9 - Moves
        DBAA-DBAB - Trainer ID
        DBAC-DBAE - Experience
        DBAF-DBB0 - HP EV
        DBB1-DBB2 - Attack EV
        DBB3-DBB4 - Defense EV
        DBB5-DBB6 - Speed EV
        DBB7-DBB8 - Special EV
        DBB9 - Attack/Defense IV

DBBA - Speed/Special IV
DBBB-DBBE - PP Moves

Pokémon 10

DBBF - Pokémon
DBC0-DBC1 - HP
DBC2 - Level
DBC3 - Status
DBC4-DBC5 - Types
DBC6 - Held Item (When traded to Generation II)
DBC7-DBCA - Moves
DBCB-DBCC - Trainer ID
DBCD-DBCF - Experience
DBD0-DBD1 - HP EV
DBD2-DBD3 - Attack EV
DBD4-DBD5 - Defense EV
DBD6-DBD7 - Speed EV
DBD8-DBD9 - Special EV
DBDA - Attack/Defense IV
DBDB - Speed/Special IV
DBDC-DBDF - PP Moves

Pokémon 11

DBE0 - Pokémon
DBE1-DBE2 - HP
DBE3 - Level
DBE4 - Status
DBE5-DBE6 - Types
DBE7 - Held Item (When traded to Generation II)
DBE8-DBEB - Moves
DBEC-DBED - Trainer ID
DBEE-DBF0 - Experience
DBF1-DBF2 - HP EV
DBF3-DBF4 - Attack EV
DBF5-DBF6 - Defense EV
DBF7-DBF8 - Speed EV
DBF9-DBFA - Special EV
DBFB - Attack/Defense IV
DBFC - Speed/Special IV
DBFD-DC00 - PP Moves

Pokémon 12

DC01 - Pokémon
DC02-DC03 - HP
DC04 - Level
DC05 - Status
DC06-DC07 - Types
DC08 - Held Item (When traded to Generation II)
DC09-DC0C - Moves
DC0D-DC0E - Trainer ID
DC0F-DC11 - Experience
DC12-DC13 - HP EV
DC14-DC15 - Attack EV
DC16-DC17 - Defense EV

DC18-DC19 - Speed EV
DC1A-DC1B - Special EV
DC1C - Attack/Defense IV
DC1D - Speed/Special IV
DC1E-DC21 - PP Moves

Pokémon 13

DC22 - Pokémon
DC23-DC24 - HP
DC25 - Level
DC26 - Status
DC27-DC28 - Types
DC29 - Held Item (When traded to Generation II)
DC2A-DC2D - Moves
DC2E-DC2F - Trainer ID
DC30-DC32 - Experience
DC33-DC34 - HP EV
DC35-DC36 - Attack EV
DC37-DC38 - Defense EV
DC39-DC3A - Speed EV
DC3B-DC3C - Special EV
DC3D - Attack/Defense IV
DC3E - Speed/Special IV
DC3F-DC42 - PP Moves

Pokémon 14

DC43 - Pokémon
DC44-DC45 - HP
DC46 - Level
DC47 - Status
DC48-DC49 - Types
DC4A - Held Item (When traded to Generation II)
DC4B-DC4E - Moves
DC4F-DC50 - Trainer ID
DC51-DC53 - Experience
DC54-DC55 - HP EV
DC56-DC57 - Attack EV
DC58-DC59 - Defense EV
DC5A-DC5B - Speed EV
DC5C-DC5D - Special EV
DC5E - Attack/Defense IV
DC5F - Speed/Special IV
DC60-DC63 - PP Moves

Pokémon 15

DC64 - Pokémon
DC65-CC66 - HP
DC67 - Level
DC68 - Status
DC69-DC6A - Types
DC6B - Held Item (When traded to Generation II)
DC6C-DC6F - Moves
DC70-DC71 - Trainer ID
DC72-DC74 - Experience

DC75-DC76 - HP EV
DC77-DC78 - Attack EV
DC79-DC7A - Defense EV
DC7B-DC7C - Speed EV
DC7D-DC7E - Special EV
DC7F - Attack/Defense IV
DC80 - Speed/Special IV
DC81-DC84 - PP Moves

Pokémon 16

DC85 - Pokémon
DC86-DC87 - HP
DC88 - Level
DC89 - Status
DC8A-DC8B - Types
DC8C - Held Item (When traded to Generation II)
DC8D-DC90 - Moves
DC91-DC92 - Trainer ID
DC93-DC95 - Experience
DC96-DC97 - HP EV
DC98-DC99 - Attack EV
DC9A-DC9B - Defense EV
DC9C-DC9D - Speed EV
DC9E-DC9F - Special EV
DCA0 - Attack/Defense IV
DCA1 - Speed/Special IV
DCA2-DCA5 - PP Moves

Pokémon 17

DCA6 - Pokémon
DCA7-DCA8 - HP
DCA9 - Level
DCAA - Status
DCAB-DCAC - Types
DCAD - Held Item (When traded to Generation II)
DCAE-DCB1 - Moves
DCB2-DCB3 - Trainer ID
DCB4-DCB6 - Experience
DCB7-DCB8 - HP EV
DCB9-DCBA - Attack EV
DCBB-DCBC - Defense EV
DCBD-DCBE - Speed EV
DCBF-DCC0 - Special EV
DCC1 - Attack/Defense IV
DCC2 - Speed/Special IV
DCC3-DCC6 - PP Moves

Pokémon 18

DCC7 - Pokémon
DCC8-DCC9 - HP
DCCA - Level
DCCB - Status
DCCC-DCCD - Types
DCCE - Held Item (When traded to Generation II)

DCCF-DCD2 - Moves
DCD3-DCD4 - Trainer ID
DCD5-DCD7 - Experience
DCD8-DCD9 - HP EV
DCDA-DCDB - Attack EV
DCDC-DCDD - Defense EV
DCDE-DCDF - Speed EV
DCE0-DCE1 - Special EV
DCE2 - Attack/Defense IV
DCE3 - Speed/Special IV
DCE4-DCE7 - PP Moves

Pokémon 19

DCE8 - Pokémon
DCE9-DCEA - HP
DCEB - Level
DCEC - Status
DCED-DCEE - Types
DCEF - Held Item (When traded to Generation II)
DCF0-DCF3 - Moves
DCF4-DCF5 - Trainer ID
DCF6-DCF8 - Experience
DCF9-DCFA - HP EV
DCFB-DCFC - Attack EV
DCFD-DCFE - Defense EV
DCFF-DD00 - Speed EV
DD01-DD02 - Special EV
DD03 - Attack/Defense IV
DD04 - Speed/Special IV
DD05-DD08 - PP Moves

Pokémon 20

DD09 - Pokémon
DD0A-DD0B - HP
DD0C - Level
DD0D - Status
DD0E-DD0F - Types
DD10 - Held Item (When traded to Generation II)
DD11-DD14 - Moves
DD15-DD16 - Trainer ID
DD17-DD19 - Experience
DD1A-DD1B - HP EV
DD1C-DD1D - Attack EV
DD1E-DD1F - Defense EV
DD20-DD21 - Speed EV
DD22-DD23 - Special EV
DD24 - Attack/Defense IV
DD25 - Speed/Special IV
DD26-DD29 - PP Moves

Trainer name

DD2A-DD34 - Trainer name for 1st
DD35-DD3F - Trainer name for 2nd
DD40-DD4A - Trainer name for 3rd

DD4B-DD55 - Trainer name for 4th
DD56-DD60 - Trainer name for 5th
DD61-DD6B - Trainer name for 6th
DD6C-DD76 - Trainer name for 7th
DD77-DD81 - Trainer name for 8th
DD82-DD8C - Trainer name for 9th
DD8D-DD97 - Trainer name for 10th
DD98-DDA2 - Trainer name for 11th
DDA3-DDAD - Trainer name for 12th
DDAE-DDB8 - Trainer name for 13th
DDB9-DDC3 - Trainer name for 14th
DDC4-DDCE - Trainer name for 15th
DDCF-DDD9 - Trainer name for 16th
DDDA-DDE4 - Trainer name for 17th
DDE5-DDEF - Trainer name for 18th
DDF0-DDFA - Trainer name for 19th
DDFB-DE05 - Trainer name for 20th

Nickname

DE06-DE10 - Nickname for 1st
DE11-DE1B - Nickname for 2nd
DE1C-DE26 - Nickname for 3rd
DE27-DE31 - Nickname for 4th
DE32-DE3C - Nickname for 5th
DE3D-DE47 - Nickname for 6th
DE48-DE52 - Nickname for 7th
DE53-DE5D - Nickname for 8th
DE5E-DE68 - Nickname for 9th
DE69-DE73 - Nickname for 10th
DE74-DE7E - Nickname for 11th
DE7F-DED9 - Nickname for 12th
DE8A-DE94 - Nickname for 13th
DE95-DE9F - Nickname for 14th
DEA0-DEAA - Nickname for 15th
DEAB-DEB5 - Nickname for 16th
DEB6-DEC0 - Nickname for 17th
DEC1-DECB - Nickname for 18th
DECC-DED6 - Nickname for 19th
DED7-DEE1 - Nickname for 20th

Internal data (HRAM)

When the game boots, HRAM (FF80 to FFFE) is initialized to 0.

OAM DMA

```
FF80-FF89 - OAM DMA routine
```

Misc.

FF8A - Soft reset frame counter
Initially has value 16.
Decremented each frame START+SELECT+A+B are held down ; when 0, the game soft resets.

FF9F-FFA1 - Money / Coins amount (big-endian)
When holding coins amount, 0 is written to FF9F for some reason.

Serial

FFA9-FFAD - Serial status data (sync method, etc.)

Graphics scroll values

FFAE - Value copied to SCX at VBlank
FFAF - Value copied to SCY at VBlank
FFB0 - Value copied to WY at VBlank

Joypad

FFB1 - Joypad input during previous frame
FFB2 - Released buttons on this frame
FFB3 - Pressed buttons on this frame
FFB4 - Held buttons on this frame

FFB5 - Low-sensitivity joypad output, controlled by FFB6 and FFB7.
FFB6 - If zero and A or B is held, outputs nothing. Otherwise, considers buttons held for more than half a second being p
Has no influence if FFB7 is zero.
FFB7 - If zero, FFB5 contains newly-pressed buttons only.

ROM banking

FFB8 - Loaded ROM bank.
FFB9 - Saved ROM bank.

VBlank data transfer

FFBA - Transfer background to VRAM during VBlank ?
FFBB - Which portion of the screen to transfer ? (0-1-2 = top-middle-bottom)

FFBC-FFBD - Where to copy background to ? (does not account for FFBB offset ; low-endian address)

FFBF-FFC0 - Stack pointer save

FFC1-FFC2 - Where to copy background from ? (used during copy ; low-endian address)
FFBA is copied to FFC1 (LSB of address).
FFC3-FFC4 - Where to copy background to ? (low-endian address)
FFC5 - Number of rows to copy

FFC6 - Number of 16-byte units to copy during VBlank
FFC7-FFC8 - Source

```
FFC9-FFCA - Destination
```

```
FFCB - Number of 8-byte units to copy during VBlank
FFCC-FFCD - Source
FFCE-FFCF - Destination
```

VBlank 2x2 tile block redraw

```
FFD0 - What to redraw (0-1-2 = nothing-column-row)
FFD1-FFD2 - Destination
```

RNG

```
FFD3 - RandomAdd
FFD4 - RandomSub
```

On each call to the Random function, the value of register rDIV (roughly tracking how many bytes were executed) and the carry are **added** to RandomAdd, and **subtracted** from RandomSub.

VBlank interface

```
FFD5 - Frame counter (decremented each VBlank)
FFD6 - Set to 0 when a VBlank occurs
```

Misc. 2

```
FFD7 - Tileset type (0-1-2 = indoors-cave-outside)
Nonzero values have the water animation.
Value 2 has the flower animation.
```

```
FFF3 - Battle turn (0-1 = player-opponent)
```

```
FFF8 - Joypad input
FFF9 - Diable joypad polling
```

Internal Data for Pokémon Red and Blue

ROM Map • RAM Map • Text Table • Notes • Tutorials

Category: RAM maps