

# Eboot.PBP

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### PARAM.PBP

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ICON0 eboot.pbp FW  
6.60

# Eboot.PBP

Used on PSP (PSP remaster and PSN content:PS1 classic and Minis), to be loaded with build in PSP emulator on PS3. See [Emulation](#).

With PSP remaster game, you can select either to start the game directly or the NPJA0040/USRDIR/EBOOT.BIN (Ad-Hoc Party folder). An ICON of the game is also loaded on the top left corner on the menu.

Used also for PSP FW from PS3 internet browser ([http://www.jp.playstation.com/psp/update/ud\\_o3.html](http://www.jp.playstation.com/psp/update/ud_o3.html)) correct link if available in English) to transfer on PSP or external storage device.



Selection window

RCO PNG used on PS3 for EBOOT.PBP ([http://www.ps3devwiki.com/wiki/File:Psp\\_update\\_thumbnail.png](http://www.ps3devwiki.com/wiki/File:Psp_update_thumbnail.png))

## Header and filetable

| Offset | Purpose   |
|--------|---|
| 0x00   | The PBP signature, always is 00 50 42 50 or the string "<null char>PBP"   |
| 0x04   | Unknown purpose, possibly the version number. Currently is always 0x00000100 or 0x01000100 (some MINIS, PSP remaster and PSP PlayView). |
| 0x08   | Offset of the file PARAM.SFO (?this value should always be 0x28?)   |
| 0x0C   | Offset of the file ICON0.PNG  |
| 0x10   | Offset of the file ICON1.PMF or ICON1.PNG   |
| 0x14   | Offset of the file PIC0.PNG or UNKNOWN.PNG (Value can be repeated)  |
| 0x18   | Offset of the file PIC1.PNG or PICT1.PNG  |
| 0x1C   | Offset of the file SND0.AT3   |
| 0x20   | Offset of the file DATA.PSP   |
| 0x24   | Offset of the file DATA.PSAR  |

Usually every .PBP embeds a PARAM.SFO file and PARAM.SFO file starts at offset 0x28.

## PARAM.SFO






Basically the information file for the .PBP - has title, parental control level etc.














Fews parameters inside different type of .pbp (psp remaster, psp game, minis, ps1 classic..)




For the external PS3 SFO, see [PARAM.SFO](#). Some parameters such [SAVEDATA\\_DETAIL](#) related but used separately from the eboot.pbp as well.

For PS1 classic, offset .SFO should not be variable on EBOOT.PBP.

(e.g.: Title of the game should start at offset 0x358 with category: ME, not as EG)

| Key (Parameters) | Description                  | Format (DATA TYPE) | Max length | Value example | Used on  | Note   |
|------------------|------------------------------|--------------------|------------|---------------|--|--|
| APP_VER          | Application or Patch Version | utf-8              | 8          | 1.00          |  | PS1 classic should not have this parameter.    |
| ATTRIBUTE        | Various parameter            | integer            | 4          | 01 00 60 01   |  | PS1 classic do not have attribute.             |
| BOOTABLE         | Is bootable or not           | integer            | 4          | 01 00 00 00   |  | Parameters PS1 classic should start from here. |
| CATEGORY         | Category of Content          | utf-8              | 4          | --            |  | Category of PSF, as per the table above.       |
|                  |                              |                    |            |               |  |  |

|                |                               |         |             |             |  |  |
|----------------|-------------------------------|---------|-------------|-------------|--|--|
| DISC_ID        | Product number of the game(?) | integer | 16 (0X10)   | NPXX12345   |    | Equal to Game ID for PS3. See <u>DiscID</u> .  |
| DISC_NUMBER    | --                            | integer | 4           | 1           |    | Which disc (out of DISC_TOTAL) is this? (Counts from 1.)   |
| DISC_TOTAL     | --                            | integer | 4           | 1           |    | Total number of UMD discs for this game.   |
| DISC_VERSION   | --                            | utf-8   | 8           | 1.00        |    | Version of the game(?), e.g. "1.00"  |
| DRIVER_PATH    | --                            | utf-8   | 64 (0x40)   | --          |    |  |
| HRKGMP_VER     | --                            | integer | 4           | 0           |    |  |
| LICENSE        | License information           | utf-8   | 512 (0x200) | --          |   |  |
| MEMSIZE        | --                            | integer | 4           | 1           |  | add extra RAM for eboot (Not for PSP-1000), first used on homebrew: snes TYL   |
| PARENTAL_LEVEL | Parental Lock Level           | integer | 4           | "3"         |  | Minimum parental control level needed to access this file (1-11, 1=general audience, 5=12 years, 7=15 years, 9=18 years) //E.G.:Set as 3 on ModNation Racers |
| PBOOT_TITLE    | --                            | utf-8   | 128 (0x80)  | --          |  | Used on PBOOT.PBP (Update)   |
| PSP_SYSTEM_VER | --                            | utf-8   | 8           | 6.35        |  | Version of PSP system software required to run the game(?)   |
| REGION         | --                            | integer | 4           | 00 80 00 00 |  | Bitmask of allowed regions. 0x8000 is region 2?  |
| TITLE          | Game Title (Default language) | utf-8   | 128 (0x80)  | --          |  | Text shown under the "Game" heading in the save game menu.   |
|                |                               |         |             |             |  | Localized version of the TITLE   |





|             |            |         |            |      |  |   |
|-------------|------------|---------|------------|------|--|---|
| TITLE_XX    | Game Title | utf-8   | 128 (0x80) | --   |  | attribute. See Languages ( <a href="http://www.ps3devwiki.com/wiki/Content_Information_Files#Languages">http://www.ps3devwiki.com/wiki/Content_Information_Files#Languages</a> ). |
| UPDATER_VER | --         | utf-8   | 8          | 6.60 |  | Used by the firmware updater program to denote the version it upgrades the firmware to. Category MG, on PSP_GAME: SYSDIR/UPDATE/PARAM.SFO if not empty                            |
| USE_USB     | --         | integer | 4          | 0    |  |   |

\*LANGUAGE category MG Language of the game. "JP" indicates Japanese.

## Attribute

- MINIS used are for X1 category ATTRIBUTE\_In\_Bootable\_content ([http://www.ps3devwiki.com/wiki/PARAM.SFO#ATTRIBUTE\\_In\\_Bootable\\_content](http://www.ps3devwiki.com/wiki/PARAM.SFO#ATTRIBUTE_In_Bootable_content))

## Category

| PSP | PS3 SFO related   | Note   |
|-----|---|--|
| EG  | MN  | PSP Essentials or Extended or External (or Episode) Games? Minis   |
| EG  | PE  | PSP remaster (and in others only PSP released games?)  |
| EG  | PP  | Not bootable on PS3  |
| MA  |  | Apps   |
| ME  | 1P  | PS1 Classic  |
| MG  |  | MemoryStick Game?. For update FW :MSTKUPDATE, Apps game and Game data (for param.pbp , not as save data). PP on PS3 is possible. |
| MS  |  | MemoryStick Save for Game&apps (PSP remaster also)   |
| UG  |  | UMD Disc Game  |
| PG  | PP  | Game update  |

## DISC\_ID (or TITLE\_ID ?)

Some special titles from SCE utility apps:

- NPIA00013 (SensMe) [http://www.playstation.com/psp-app/sensme/en/download\\_pc.html](http://www.playstation.com/psp-app/sensme/en/download_pc.html)

## Update for Game (PBOOT.PBP): some values

APP\_VER: 1.01 or more

ATTRIBUTE: 01 00 00 00

CATEGORY: PG

PBOOT\_TITLE

## Content Information Files


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For PS3 see: [Content\\_Information\\_Files](#).

### ICON0.PNG

The little icon in 32bit colour PNG format. Max resolution is 144x80.

 : 80x80


 : 80x80 (same used on savedata)


 :

 : 144x80

### ICON1.PMF or ICON1.PNG

The little animated icon in PSMF format or image in PNG.

 :ICON1.PNG or ICON1.PMF (310x180)

 :ICON1.PNG or ICON1.PMF (310x180)

 :

### PIC0.PNG

"Information" image in PNG format. Max resolution is 480x272.


 :


 :

 :

### PIC1.PNG or PICT1.PNG

The background image in 32bit colour PNG format. Max resolution is 480x272.

 :PICT1.PNG (480x272)

 :PICT1.PNG (480x272)

 :

 : PIC1.PNG (480x272)

## SND0.AT3

The sound which is played when the icon is highlighted, in ATRAC3 format.

**minis** :

**PS** : not present.

**PSP** :

**PSP Remaster** : not present.

## DATA.PSP

More information, except more targeted at the executable portion (contains info such as ELF size):

### Boot and Warning image:

- **minis** :

"minis"boot logo (visual content is similar than the file located on dev\_flash/pspemu/flash0/logo/minis\_logo/)

Display on Screen from PS3 side might be altered according to the FW.

PNG format (480x272)

Not all Minis games have the second

- **PS** :

| Offset | Length | Name | Description                                    |
|--------|--------|------|--|
| 0x00   | 16     | -    | ~PSP (7E 50 53 50 00 02 01 00 01 01 20)        |
| ...    |        |      |  |
| 0x2C   | -      | Size | Length first part / offset second part (40 25) |

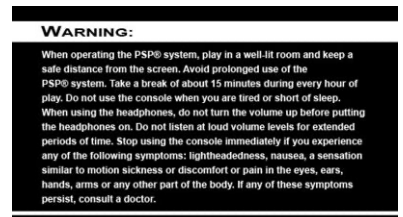
- **PSP Remaster** :

Menu screen selection image for PSP Remaster located in PSP\_EMU.

See [Emulator settings](#).



Logo screen from eboot.pbp



Minis warning logo



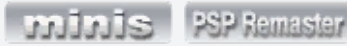

Menu screen bin

## Other

- When the eboot is signed as free demo (PSP 6.60 OFW might block it, 6.39 FW no).

## DATA.PSAR

The bulk of the EBOOT.PBP, and the portion which contains the executable code.

| Offset | Length          | Name  | Description  |
|--------|-----------------|-------|--|
| 0x00   | 16 bytes (0x10) | magic | <div><div> : NPUMDIMG<br/>(4E 50 55 4D 44 49 4D 47 03 00 00 01 10 00 00 00)<br/>(used also on PSP game)</div><div> : PSISOIMG0000<br/>(50 53 49 53 4F 49 4D 47 30 30 30 30 xx xx xx xx)</div></div> <p>See <a href="#">PSISOIMG0000</a>.</p> <p>See <a href="#">Iso.bin.edat_Disc_map</a>.</p> |

 :

- Note: this "identifier" seems to be separated in: 8 + 4 + 4 bytes:

For PS1 Classic the last 4 bytes give the size of the first part of the PSAR, which also means it's the offset (DATA.PSAR file) for part 2 (string as: STARTDAT)

- PSTITLEIMG000000: Not present on all PS1 Classic and followed also by 4 bytes giving length of first part. After one .pgd part and padding, "PSISOIMG0000" + 4bytes as 00.
- PGD

See [PGD wiki page on PSP Dev wiki \(https://playstationdev.wiki/pspdevwiki/index.php?title=PGD\)](https://playstationdev.wiki/pspdevwiki/index.php?title=PGD).

- STARTDAT: header contain the header size (50) and .png size (e.g.: "A5 2F" when similar MINIS Warning logo ([http://www.ps3devwiki.com/wiki/File:Minis\\_Warning\\_logo.png](http://www.ps3devwiki.com/wiki/File:Minis_Warning_logo.png)) or 06 26 for PSP remaster).

Last part is another .PGD section.

## PARAM.PBP

PSP XMB referenced it as "game data". Used by: PlayView, DLC/add on.

| Offset | Length | Value       | Notes   |
|--------|--------|-------------|---|
| 0x00   | 4      | 00 50 42 50 | Magic (".PBP")  |
| 0x04   | 4      | 01 00 01 00 | Unknown purpose, possibly the version number. Currently is always similar (also on 1.00 or 1.02 disc_version) |
| 0x08   | 4      | 28 00 00 00 | Offset of the file PARAM.SFO (this value should always be 0x28)   |
| 0x0C   | 4      | DC 01 00 00 | Offset of the file ICON0.PNG 144x80 (similar since same parameters are used)                                  |
| 0x10   | 4      | xx xx 00 00 | Offset of the file ICON1.PNG or ICON1.PMF 310x180 ("information")   |
| 0x14   | 4      | xx xx 00 00 | repeat Offset of the file ICON1.PNG or ICON1.PMF  |
| 0x18   | 4      | xx xx 00 00 | Offset of the file PIC1.PNG 480x272 ("Background") not all Playview have it (and so, offset second part)      |
| 0x1C   | 4      | xx xx xx 00 | Offset second part of the file  |
| 0x20   | 4      | xx xx xx 00 | repeat second part of the file  |
| 0x24   | 4      | xx xx xx 00 | repeat second part of the file  |

PARAM.SFO starts at offset 0x28 with following parameters (see above for length or purpose):

- BOOTABLE: 00 00 00 00
- CATEGORY: "MG"
- DISC\_ID :
- DISC\_VERSION: "1.00" , "1.02"
- PARENTAL\_LEVEL
- PSP\_SYSTEM\_VER: 1.00
- REGION : 00 00 80 00
- TITLE
- USE\_USB: 00 00 00 00

Then the ICON0.PNG starts usually at offset 0x1DC

ICON0.PNG and PIC1.PNG:

After the 2 or 3 .png, the second part of the file start (length is always 0x20 bytes).

## Links and Tools

- PSARdumper
  - [\[1\] \(http://dl.qj.net/psp/homebrew-applications/psardumper-for-ofw-660.html\)](http://dl.qj.net/psp/homebrew-applications/psardumper-for-ofw-660.html)



- Note: This PSAR dumper is only for PSP firmware packages.
- PRXdecrypter
  - [2] (<http://dl.qj.net/psp/homebrew-applications/prxdecrypter-v26b.html>)
  - Note: PRXdecrypter is a modification of PSARDumper that can decrypt other files as MODULES.PRX or EBOOT.BIN.
- PBP Unpacker
  - [3] (<http://dl.qj.net/psp/tools-utilities-on-pc/pbp-unpacker-v094.html>)
  - Source code: []
  - Note: There is a bug in PBP Unpacker version <=0.94 where .PBP with size bigger than 1MB are not supported.
- psnpkgdecryptor-extractor by TLM for PKG and KEYS.BIN
  - [4] (<https://sites.google.com/site/theleecherman/psnpkgdecryptor-extractor>)
  - Note: Some feature (KEYS.BIN is used by PS1 classic on PSP):

Extract & Decrypt & Dump all PSP PKG files ( Games & Minis, DLCs & Addons, NeoGeo, PC Engine, PSOne Classic Games, ISO, EBOOT, EDAT/PGD files to Decrypt (Version 1.3), Dump, Verify ISO  
 Generate KEYS.BIN for PSOne Game from PSOne EBOOT.PBP  
 ...

- Guide Running homebrew on PS3 via PSP emulator (minis)
  - [5] (<http://www.ps3hax.net/showthread.php?t=54596>)
- PSP homebrew - libLZR v0.11
  - [6] (<https://qj.net/psp/homebrew-liblzs-v0-11/>)
  - Note: The library de- and encodes LZR streams (as used in the Sony PSP firmware). ?Used in PGD only?
- psxtract
  - [7] (<http://www.ps3hax.net/showthread.php?t=70512>)
  - Note: PSXtract is a tool to convert PS1 PBP (coming from PKG) to ISO
- Document.dat (manual) resource:
  - [8] (<http://www.psxpspmanuals.com/>)
- More information about the PSAR: [http://www.ps3devwiki.com/files/documents/-SONY%20PS3%20SDK%20Documentation/360.01/cell/en/html/file\\_access/PSARC-Users\\_Guide\\_e.htm](http://www.ps3devwiki.com/files/documents/-SONY%20PS3%20SDK%20Documentation/360.01/cell/en/html/file_access/PSARC-Users_Guide_e.htm)
- For structure (and history of research): <http://lan.st/showthread.php?t=258>
- For files related to EBOOT.PBP (keys.bin, document.dat etc...), basic infos on the talk page also.
- For history of the page: original link for PBP structure)  
<http://endlessparadigm.com/forum/showthread.php?tid=13>

v · e ([https://www.psdevwiki.com/ps3/edit/Template:File\\_Formats](https://www.psdevwiki.com/ps3/edit/Template:File_Formats))

#### Certified File

Certified File · SELF · SPRX · Capability Flags · PRX · Program Type ·  
 SELFs inside ELF · Revision versus Version

|                       |   |  |
|-----------------------|---|--|
| <b>SCE File Types</b> | <b>NPDRM</b>  | <a href="#">NPDRM</a> · <a href="#">App Types</a> · <a href="#">ACT.DAT</a> · <a href="#">RIF</a>  |
|                       | <b>PKG</b>  | <a href="#">PKG files</a> · <a href="#">PKG DIGEST.DAT</a>   |
|                       | <b>EDAT</b>   | <a href="#">EDAT files</a>   |
| <b>RCOXML</b>         | <b>Resource Container (RCO)</b>   | <a href="#">Rcomage</a> · <a href="#">GimConv</a> · <a href="#">Graphic Image Map (GIM)</a> · <a href="#">MFAudio</a> · <a href="#">Languages</a> · <a href="#">XMB Fonts</a> · <a href="#">XMB Layouts</a>  |
|                       | <b>RCOXML Coding</b>  | <a href="#">RCOXML Script</a> · <a href="#">RCOXML Images</a> · <a href="#">RCOXML Fonts</a> · <a href="#">RCOXML Texts</a> · <a href="#">RCOXML Models</a> · <a href="#">RCOXML Sounds</a> · <a href="#">RCOXML Objects</a> · <a href="#">RCOXML Animations</a>                       |
|                       | <b>RCOXML Examples</b>  | <a href="#">RCOXML ofw animations</a> · <a href="#">RCOXML ofw sounds</a>  |
| <b>CXML</b>           | <b>Qt Resource Container (QRC)</b>  | <a href="#">Canyon.qrc</a> · <a href="#">Earth.qrc</a> · <a href="#">Icons.qrc</a> · <a href="#">Icontext.qrc</a> · <a href="#">Lines.qrc</a> · <a href="#">Raf.qrc</a> · <a href="#">Rhm.qrc</a> · <a href="#">Store.qrc</a>  |
|                       | <b>PlayStation 3 Theme (P3T)</b>  | <a href="#">01.p3t</a> · <a href="#">raf_debug.p3t</a>   |
|                       | <b>Rich Appearance Format (RAF)</b>   | <a href="#">coldboot.raf</a> · <a href="#">mustache.raf</a> · <a href="#">PlayStation JavaScript</a> · <a href="#">VSMX</a>  |
| <b>XMBML</b>          | <b>XMB Config</b>   | <a href="#">XMB-Users</a> · <a href="#">XMB-Settings</a> · <a href="#">XMB-Photo</a> · <a href="#">XMB-Music</a> · <a href="#">XMB-Video</a> · <a href="#">XMB-TV</a> · <a href="#">XMB-Game</a> · <a href="#">XMB-Network</a> · <a href="#">XMB-PSN</a> · <a href="#">XMB-Friends</a> |
|                       | <b>DB Config</b>  | <a href="#">registry.xml</a> · <a href="#">upload_list.xml</a> · <a href="#">download_list.xml</a> · <a href="#">playlist.xml</a> · <a href="#">videodownloader_list.xml</a> · <a href="#">savedata_list.xml</a>   |
|                       | <b>XMBML Coding</b>   | <a href="#">XMBML Functions</a>  |
|                       | <b>XMBML Examples</b>   | <a href="#">XMBML Folder Trees</a> · <a href="#">XMBML module-action</a> · <a href="#">XMBML Mountpoints</a> · <a href="#">XMBML Database Access</a>   |
| <b>Databases</b>      | <a href="#">XRegistry.sys</a> · <a href="#">XMB database</a> · <a href="#">Project Database (PDB)</a> · <a href="#">MMS</a> · <a href="#">XIL</a>   |  |
| <b>System Data</b>    | <b>XMB Preload</b>  | <a href="#">Content Information Files</a> · <a href="#">PARAM.HIS</a> · <a href="#">PARAM.PFD</a> · <a href="#">PARAM.SFO</a> · <a href="#">PS3_DISC.SFB</a>   |
|                       | <b>Licences</b>   | <a href="#">LIC.DAT</a> · <a href="#">LICENSE.DAT</a> · <a href="#">LICENSE.INFO</a>   |
|                       | <b>Game Data</b>  | .  |
|                       | <b>Game Saves</b>   | <a href="#">PS3 Savedata</a> · <a href="#">PS2 Savedata</a> · <a href="#">PS1 Savedata</a> · <a href="#">PSP Savedata</a>  |
|                       | <b>Trophy Data</b>  | <a href="#">Trophy livelist</a> · <a href="#">TROPHY.TRP</a> · <a href="#">Trophy</a>  |
| <b>Games/Apps</b>     | <b>PS3</b>  | <a href="#">BDemu Drive Format</a> · <a href="#">PlayStation archive (PSARC)</a>   |
|                       | <b>Emulators</b>  | <a href="#">Eboot.PBP</a> · <a href="#">PSISOIMG0000</a> · <a href="#">ISO.BIN.EDAT</a>  |
| <b>Web</b>            | <a href="#">SILKPADD</a>  |  |
| <b>Unsorted</b>       | <a href="#">archive.dat</a> · <a href="#">bootflag.dat</a> · <a href="#">lv0ldr</a> · <a href="#">lv0</a> · <a href="#">lv1.self</a> · <a href="#">SIG File Format</a> · <a href="#">PS2bootparam.dat</a> · <a href="#">vm0</a> |  |



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