

DVD-Video/DVD-Audio

Virtual Machine Command Encoding

Release 1.0.5

Apr 09 2004

1.0.5 (Apr 09 2004): Turn off header/footer -> even larger fonts! Fit field format list onto fewer pages.

1.0.4 (Apr 08 2004): Use smaller margins & larger font sizes for legibility -> more pages. Capitalization fiddling.

1.0.3 (Apr 06 2004): Formatting improvements: Cmd_Formats now 2 pages. Minor changes to explanations of command formats 0, 2, 3.

1.0.2 (Apr 01 2004): Formatting improvements using OpenOffice 680 M32.

1.0.1 (Mar 25 2004): Initial release.

=3	i_set	set_option	i_comp	compare_option =0	link_option !=0																parm_n			
=3	i_set	set_option	i_comp	!=0	=0	cp1[]																		parm_n

If (condition) { set; link }

Either compare_option or link_option may be set – *not both* (It is valid to have neither set). If compare_option=0, condition is always true. If compare_option!=0, link is always ignored.

Fields cp1, c2 are only used if compare_option != 0. Field link_params only used if link_options != 0. Field set_option always used.

=4	i_set	set_option	i_comp	compare_option	parm_n	set_params_m[i_set]													
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set; if (condition) { link }

compare_option must be != 0

=5 or 6	i_set=0	set_option	i_comp	compare_option	parm_n	parm_flag			parm_m	cp1[]									
=5 or 6	!=1	set_option		compare_option	parm_n	i_val													

5: if (condition) { set; link }

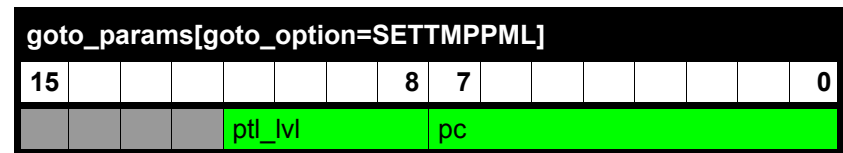
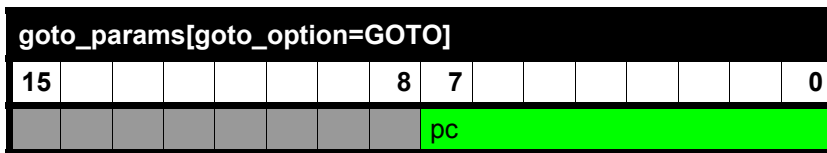
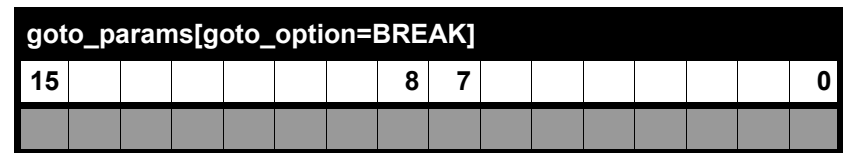
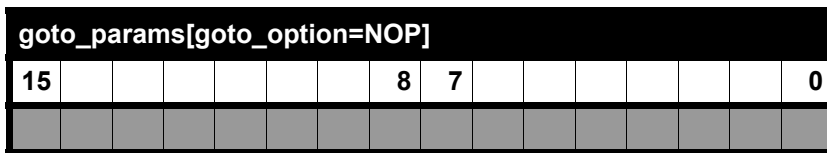
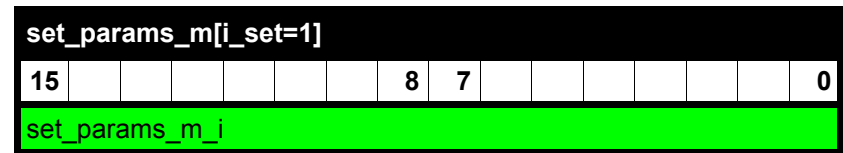
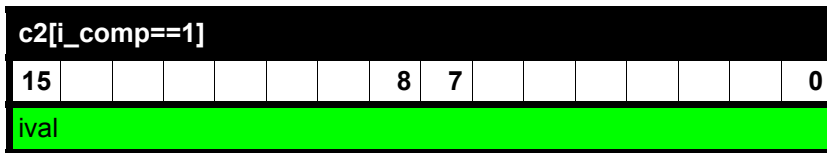
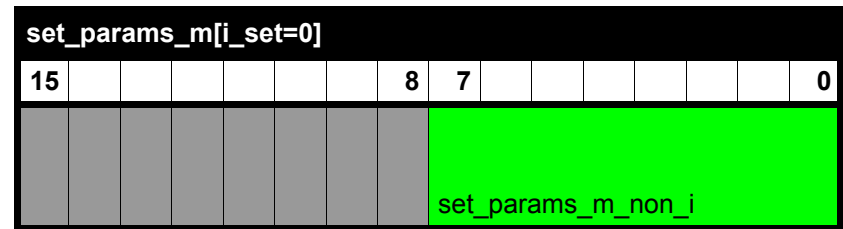
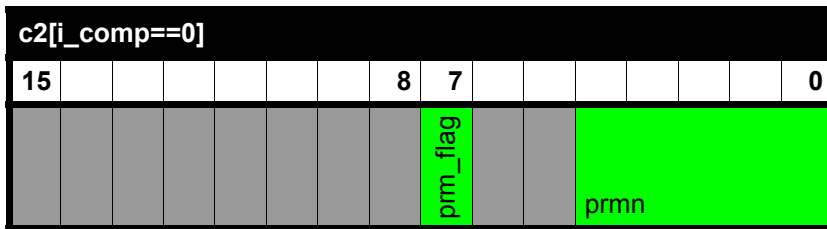
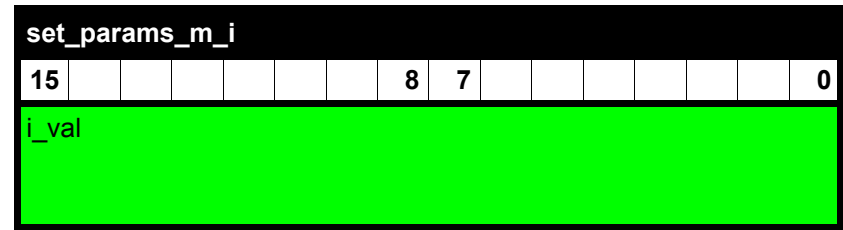
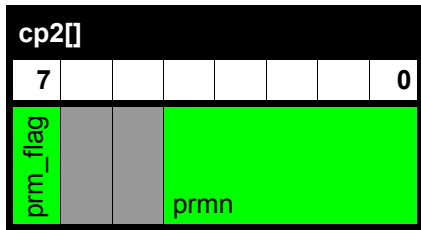
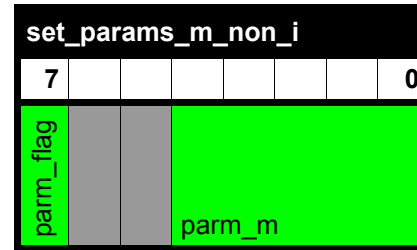
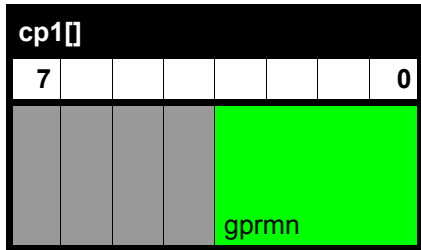
6: if (condition) { set }; link

compare_option must be != 0

(Line this & next sheet up touching the previous two pages)

Second word																																					
31								24	23							16	15										8	7									0
c2[i_comp]																goto_params[goto_option]																					
c2[i_comp]																link_params[link_option]																					
jump_params[jump_option] bits 15..0																cp1[]								cp2[]													
setsys_params[i_set, setsys_option] bits 15..0																link_params[link_option]																					
setsys_params[i_set, setsys_option] bits 15..0																cp1[]								cp2[]													

set_params_m[i_set]		link_params[link_option]	
set_params_m[i_set]		c2[i_comp]	
c2[i_comp]		link_params[LINKSINS]	
c2[i_comp]		link_params[LINKSINS]	
cp1[]	cp2[]	link_params[LINKSINS]	



link_params[link_option==LINKSINS]															
15								8	7						0
hl_btnn								linkins							

hl_btnn is not used for linkins==RSM

link_params[link_option==LINKTKN]															
15								8	7						0
hl_btnn								tkn							

link_params[link_option==LINKDLISTN]															
15								8	7						0
hl_btnn								dlistn							

link_params[link_option==LINKPGCN]															
15								8	7						0
								pgcn							

link_params[link_option==LINKPGN]															
15								8	7						0
hl_btnn								pgn							

link_params[link_option==LINKCN]															
15								8	7						0
hl_btnn								cn							

link_params[link_option==LINKPTTN]															
15								8	7						0
hl_btnn								pttn							

link_params[link_option==LINKTKNGP]															
15								8	7						0
hl_btnn								gprmn							

link_params[link_option==LINKDLISTNGP]															
15								8	7						0
hl_btnn								gprmn							

link_params[link_option==LINKPGCNGP]															
15								8	7						0
								gprmn							

link_params[link_option==LINKPGNGP]															
15								8	7						0
hl_btnn								gprmn							

link_params[link_option==LINKCNGP]															
15								8	7						0
hl_btnn								gprmn							

jump_params[jump_option=EXIT]

31							24	23								16	15											8	7										0
----	--	--	--	--	--	--	----	----	--	--	--	--	--	--	--	----	----	--	--	--	--	--	--	--	--	--	--	---	---	--	--	--	--	--	--	--	--	--	---

jump_params[jump_option=JUMPTT]

31							24	23								16	15												8	7									0
																													ftn										

jump_params[jump_option=JUMPVTS_TT]

31							24	23								16	15													8	7								0
																													vts_ftn										

jump_params[jump_option=JUMPVTS_PTT]

31							24	23								16	15													8	7								0
														pttn												vts_ftn													

jump_params[jump_option=JUMPSS]

31							24	23								16	15													8	7								0
																													domain										

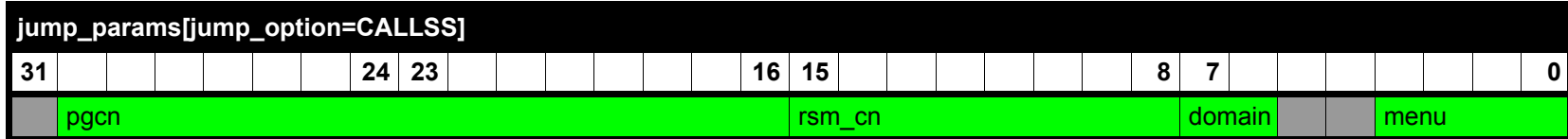
domain == FP_PGC or VMGM_ROOT: No parameters

jump_params[jump_option=JUMPSS, domain=VTSM]

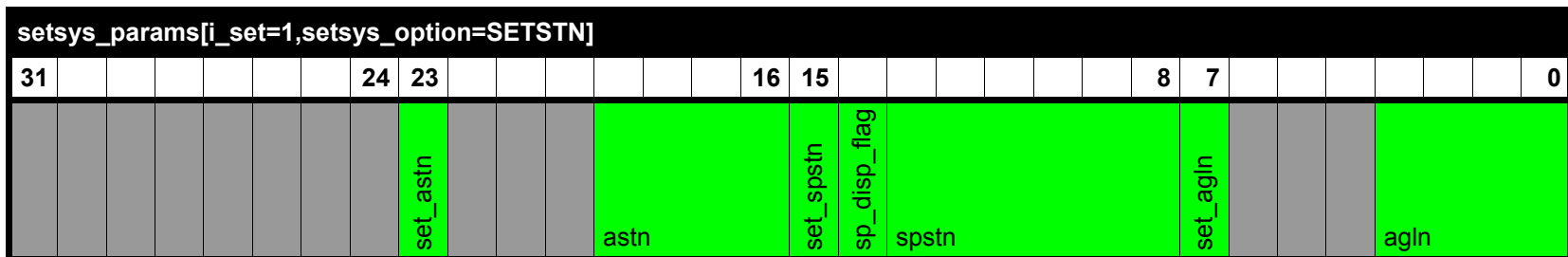
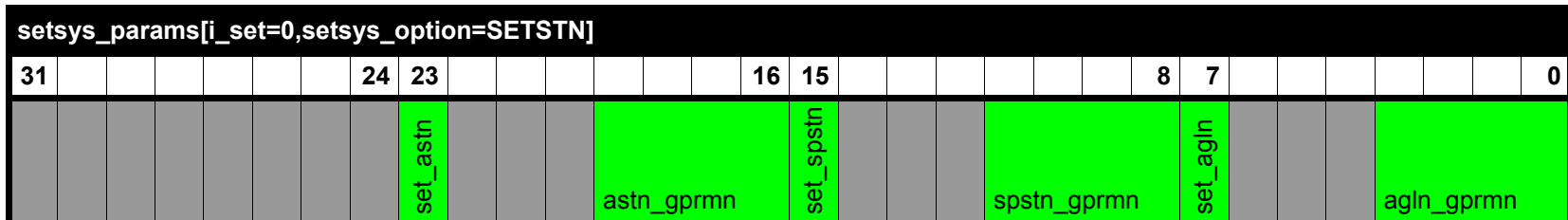
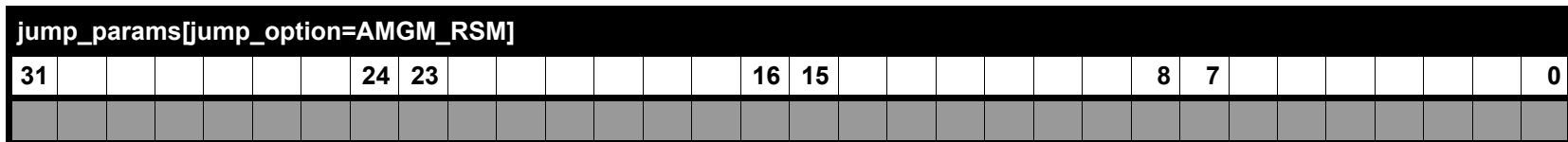
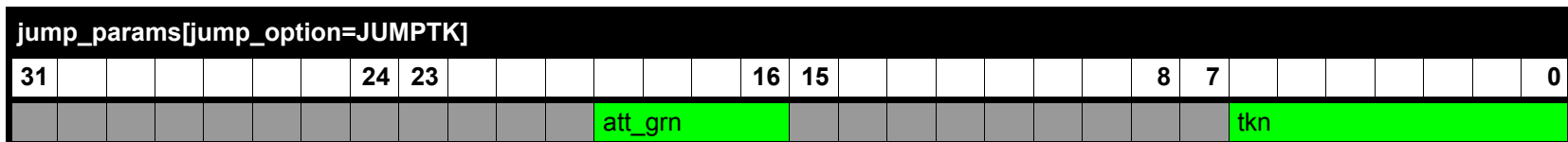
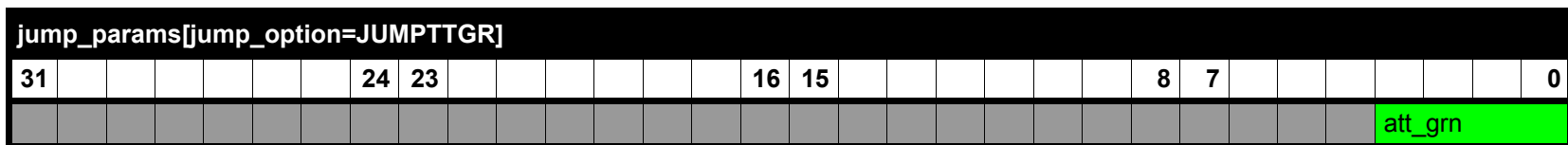
31							24	23								16	15													8	7								0
														vts_ftn								vtsn (0 -> current VTS)	VTSM								menu								

jump_params[jump_option=JUMPSS, domain=VMGM]

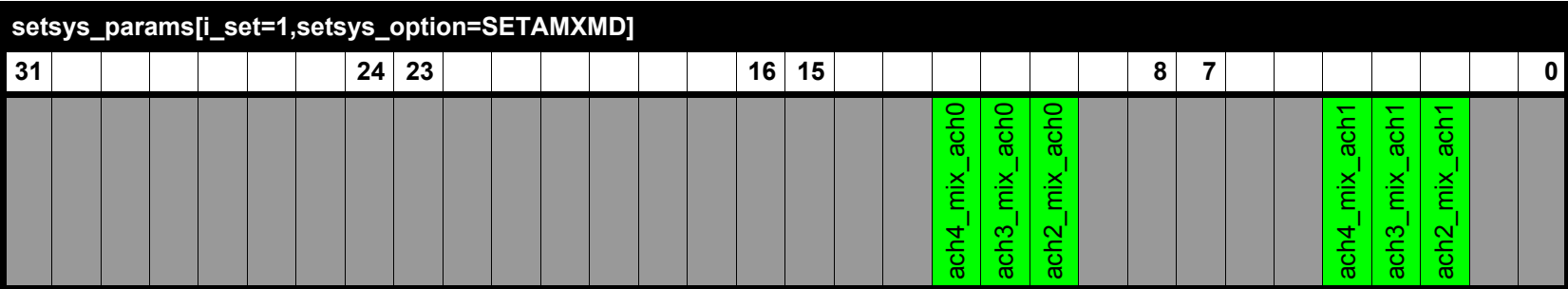
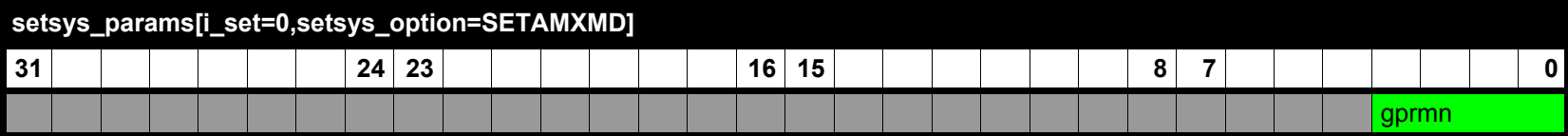
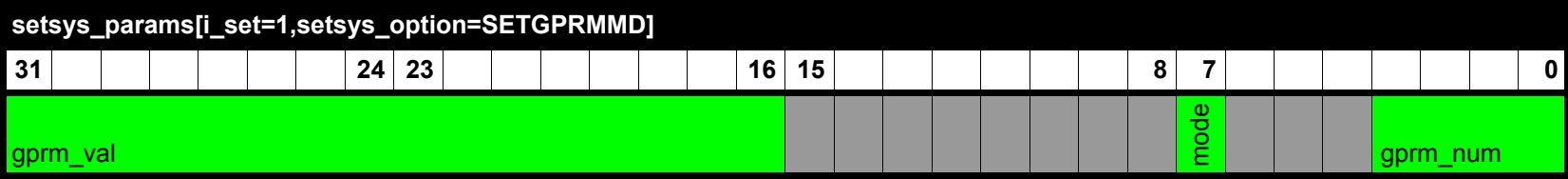
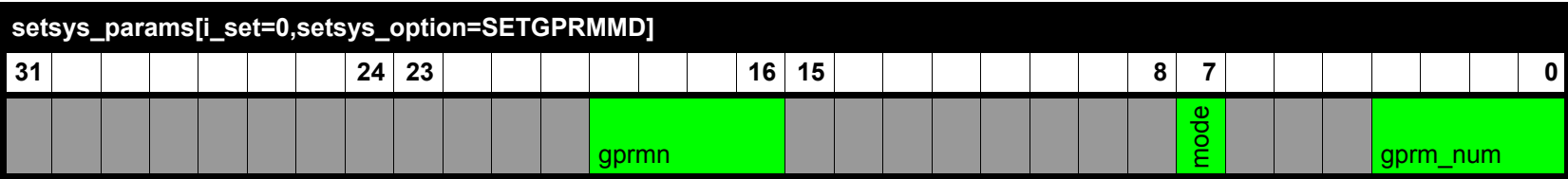
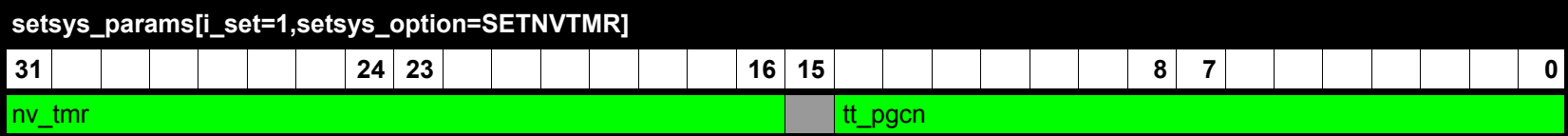
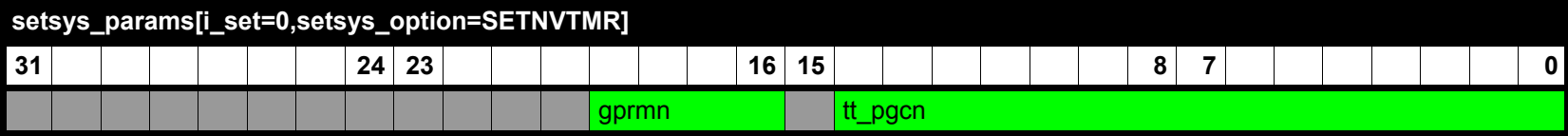
31							24	23								16	15													8	7								0
														pgcn												VMGM													



pgcn field only valid for (domain==VMGM). menu field only valid for (domain==VTSM)



For DVD-Audio discs, only 2 audio streams may exist, so only the LSB of astn is valid.



link_option
1: LinkSIns
2: LinkTkN
3: LinkDListN
4: LinkPGCN
5: LinkPTTN
6: LinkPGN
7: LinkCN
10: LinkTknGP
11: LinkDListNGP
12: LinkPGCNGP
14: LinkPGNGP
15: LinkCNGP

menu
2: TITLE
3: ROOT
4: SUB_PICTURE
5: AUDIO
6: ANGLE
7: PTT

linkins
0: NoLink
1: LinkTopC
2: LinkNextC
3: LinkPrevC
5: LinkTopPG
6: LinkNextPG
7: LinkPrevPG
9: LinkTopPGC
10: LinkNextPGC
11: LinkPrevPGC
12: LinkGoUpPGC
13: LinkTailPGC
16: Rsm
18: LinkNextDList
19: LinkPrevDList

jump_option
1: Exit
2: JumpTT
3: JumpVTS_TT
5: JumpVTS_PTT
6: JumpSS
8: CallSS
9: JumpTT_GR
10: JumpTK
11: AMGM_Rsm

goto_option
0: Nop
1: GoTo
2: Break
2: SetTmpPML

domain
0: FP
1: VMGM_ROOT
2: VTSM
3: VMGM

set_option
1: Mov
2: Swp
3: Add
4: Sub
5: Mul
6: Div
7: Mod
8: Rnd
9: And
10: Or
11: Xor

setsys_option
1: SetStn
2: SetNvTmr
3: SetGprmMd
4: SetAMxMd
6: SetHL_BTNN

compare_option
1: BC
2: EQ
3: NE
4: GE
5: GT
6: LE
7: LT