Summary of SAS Dictionary Tables and Views

Notes:
[1] → Indicates a variable that helps uniquely identify an observation
[2] Shaded rows indicate a variable unique to SAS 9.1. Items in ***italics*** are unique to SAS 9.1.3.
[3] Not all tables are shown.

dictionary.catalogs		sashelp.vcatalg
→ libname	$8	Library name [upper case]
→ memname	$32	Member name [upper case]
memtype	$8	Member type [CATALOG]
→ objname	$32	Object name [upper case]
→ objtype	$8	Object type [SCL|FRAME|FORMAT|MACRO…]
objdesc	$256	Object description
created	num	Date created [DATETIME informat/format]
modified	num	Date modified [DATETIME informat/format]
alias	$8	Object alias [upper case]
level	num	Library concatenation level [0, 1, 2, …]

dictionary.columns [1]		sashelp.vcolumn [1]
→ libname	$8	Library name [upper case]
→ memname	$32	Member name. See MEMNAME note at bottom of this page for details.
→ memtype	$8	Member type [DATA|VIEW]
→ name	$32	Column name [case as-is from data set creation except for transport files (always upper-cased)]
type	$4	Column type [char|num]
length	num	Column length
npos	num	Column position [offset within observation, e.g., 0, 1, 20]
varnum	num	Column number in table [1, 2, 3, …]
label	$256	Column label
format	$16	Column format [DATE9. $HEX22.]
informat	$16	Column informat [MMDDYY10. 8.2]
idxusage	$9	Column index type [SIMPLE|COMPOSITE|-BOTH]
sortedby	num	Key sequence order [0, 1, …] Negative if descending
xtype	$12	Extended type
notnull	$3	Not NULL? [no|yes]
precision	num	Precision
scale	num	Scale
transcode	*$3*	*Did source/target encoding differences require character remapping (transcoding)? [no|yes]*

dictionary.dictionaries		sashelp.vdctnry
→ memname	$32	Dictionary table name [upper case]
memlabel	$256	Dictionary Table label
→ name	$32	Column name [upper case]
type	$4	Column type [char|num]
length	num	Column length
npos	num	Column position [offset within observation. >= 0]
varnum	num	Column number in table [1, 2, 3, …]
format	$49	Column format [*may* include width, period]
informat	$49	Column informat [*may* include width, period]

dictionary.engines		sashelp.vengine
→ engine	$8	Engine name [upper case]
alias	$8	Alias [upper case]
description	$40	Description
preferred	$3	Preferred? [yes|no]
properties	$1024	Engine dialog properties

[1] If a SAS data set has read password protection (tables.prot position 1 = R), no variables from the data set will be displayed in this table.

dictionary.extfiles		sashelp.vextfl
→ fileref	$8	Fileref [upper case] [duplicated if files are concatenated]
→ xpath	$1024	Path name [case preserved]
xengine	$8	Engine name [upper case]

dictionary.formats		sashelp.vformat
→ libname	$8	Library name [upper case] [source='C']
→ memname	$32	Member name [upper case] [source='C']
→ path	$1024	Path name [case preserved] [source='U']
→ objname	$32	Object name [upper case] [e.g. GROUP, TYPE] [source='U', 'C']
→ fmtname	$32	Format name [upper case] [e.g., GROUP, $TYPE] [no decimal point]
→ fmttype	$1	Format type [F (format) I (informat)]
source	$1	Format source [U (user) B (built-in) C (from a catalog, i.e., created by PROC FORMAT)]
minw	num	Minimum width [>= 0]
mind	num	Minimum decimal width [>= 0]
maxw	num	Maximum width [>= 0]
maxd	num	Maximum decimal width [>= 0]
defw	num	Default width [>= 0]
defd	num	Default decimal width [>= 0]

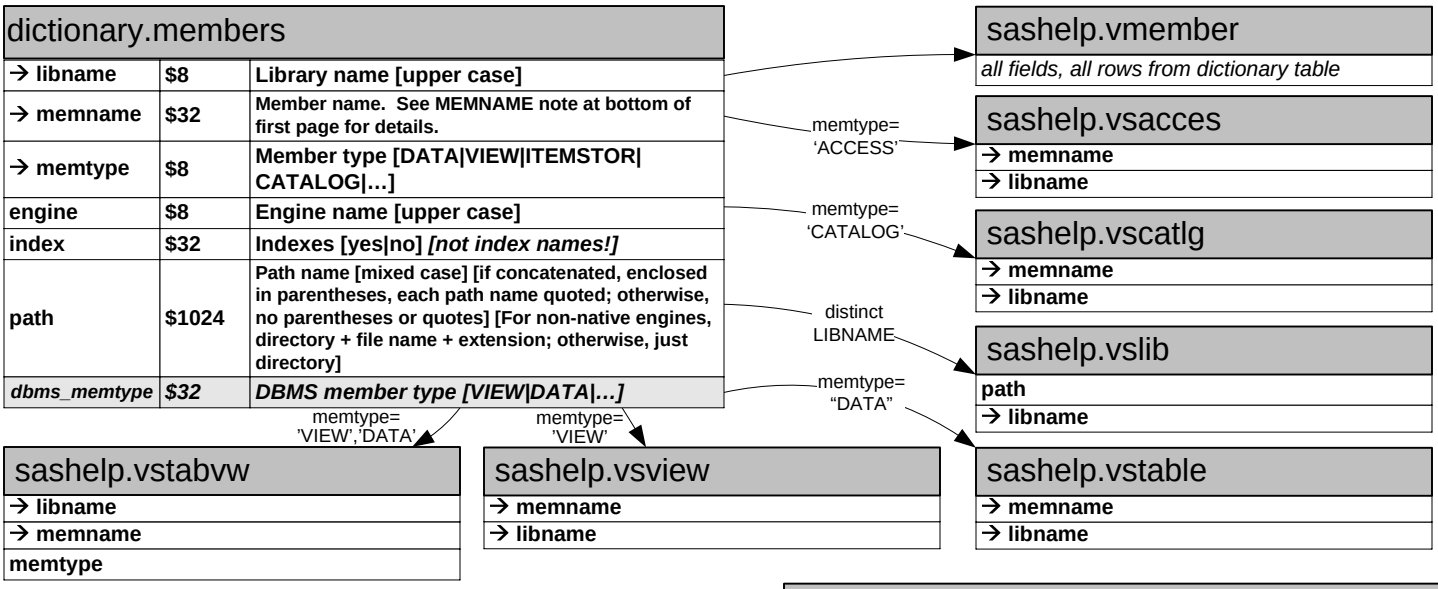
dictionary.indexes [1]		sashelp.vindex [1]
→ libname	$8	Library name [upper case]
→ memname	$32	Member name [upper case]
memtype	$8	Member type [DATA]
→ name	$32	Column name [mixed case]
idxusage	$9	Column index type [COMPOSITE|SIMPLE]
→ indxname	$32	Index name [mixed case]
→ indxpos	num	Position of column in concatenated key. Missing if not concatenated key.
nomiss	$3	NOMISS option [yes|*blank*]
unique	$3	UNIQUE option [yes|*blank*]

dictionary.libnames		sashelp.vlibnam
→ libname	$8	Library name [upper case]
engine	$8	Engine name
→ path	$1024	Path name [blank for some engines: URL, …]
→ level	num	Library concatenation level [0, 1, 2, …]
fileformat	$8	Default file format
readonly	$3	Read only? [no|yes]
sequential	$3	Sequential? [no|yes]
sysdesc	$1024	System information description
sysname	$1024	System information name
→ sysvalue	$1024	System information value

dictionary.macros		sashelp.vmacro
→ scope	$9	Macro scope [GLOBAL|AUTOMATIC|macro name (if local)]
→ name	$32	Macro variable name [upper case]
→ offset	num	Offset into macro variable [0, 200, …]. Note that the beginning of the value spanning observations may not always be stored with OFFSET=0.
value	$200	Macro variable value [case and spacing are preserved]

MEMNAME Notes:

- Native SAS engines store in upper case; non-native engines (access, excel, *et al.*) preserve case and spacing. Using the EXCEL engine, for example, program references to sheet name "Sheet One" must be "'Sheet One$'"n.
- Generation data sets are stored as *memname*[#nnn] (e.g., mast, mast#001)



dictionary.goptions		sashelp.vgopt
→ optname	$32	Option name [upper case] Enter full name, rather than alias
setting	$1024	Option setting [mixed case]
optdesc	$160	Option description
→ level	$8	Option location [GRAPH]
group	$32	Option group [*blank*]
opttype	*$8*	*Option type [boolean|char|num]*

sashelp.vallopt
all fields, all rows from dictionary table

dictionary.options		sashelp.voption
→ optname	$32	Option name [upper case] Enter full name, rather than alias: *device*, *errorabend*, *initstmt*, *linesize*, *pagesize*.
setting	$1024	Option setting [mixed case]
optdesc	$160	Option description
→ level	$8	Option location [Portable|Host]
group	$32	Option group [upper case] [MACRO|SORT|ENVFILES| …]
opttype	*$8*	*Option type [boolean|char|num]*

dictionary.titles		sashelp.vtitle
→ type	$1	Title location [T|F]
→ number	num	Title number [1|…|10]
text	$256	Title text [case preserved] Rendering information (h=1 j=l *etc.*) is removed. Macro variables are resolved.

dictionary.styles		sashelp.vstyle
→ libname	$8	Library name
→ memname	$32	Member name
→ style	$32	Style name [case preserved] V9: two-level style path V8: one-level style identifier
crdate	num	Date created [DATETIME informat/format]

dictionary.views		sashelp.vview
→ libname	$8	Library name [upper case]
→ memname	$32	Member name [upper case]
memtype	$8	Member type [VIEW]
engine	$8	Engine name [SASESQL|SASDSV| …]

dictionary.tables		sashelp.vtable
Values in {braces} are typical settings for non-native (ACCESS, EXCEL) or REMOTE libraries.		
→ libname [1]	$8	Library name [upper case]
→ memname [1]	$32	Member name. See MEMNAME note at bottom of first page for details.
→ memtype [1]	$8	Member type [DATA|VIEW]
memlabel	$256	Dataset label { }
typemem	$8	Dataset type [upper case] [*blank*|MSGFILE|ATTLIST| …]
crdate	num	Date created [DATETIME informat/format] {.}
modate	num	Date modified [DATETIME informat/format] {.}
nobs	num	Number of observations {.}
obslen	num	Observation length {0}
nvar	num	Number of variables
protect [1]	$3	Type of password protection [position 1: -|R position 2: -|W position 3: -|A] See footnote 1, page 1 for impact of read PW. {---}
compress	$8	Compression routine [NO|CHAR|BINARY] {NO }
encrypt	$8	Encryption [NO|YES] {NO }
filesize	num	File size [>= 0] {0}
npage	num	Number of pages [0, 1, …] {0}
pcompress	num	Percent compression [0, 1, …] [value stored is truncated integer - can be negative] {.}
reuse	$3	Reuse space [no|yes] {no}
bufsize	num	Buffer size {0}
delobs	num	Number of deleted observations [>= 0] {0}
indxtype	$9	Type of indexes [*blank*|SIMPLE|COMPOSITE|BOTH]
datarep	$32	Data representation
reqvector [1]	$24	Requirements vector [$HEX informat, format]
nlobs	num	Number of logical observations [. if view, else 0, 1, …] {.}
maxvar	num	Length of longest variable name
maxlabel	num	Length of longest label {0}
maxgen	num	Maximum number of generations {0}
gen	num	Generation number [., 1, 2, …] {.}
attr	$3	Data set attributes { }
sortname	$8	Name of collating sequence { }
sorttype	$4	Sorting type [S=sort verified SR=sort w. NODUPREC SK=sort w. NODUPKEY] { }
sortchar	$8	Character sorted by [ANSI|ASCII|…] { }
datarepname	$170	Data representation name [blank if view] { }
encoding	$256	Data encoding [blank if view] {default}
dbms_memtype	*$8*	*DBMS member type [VIEW|TABLE|…] Blank if not using DBMS engine (e.g., access, excel)*

[1] If a SAS data set has read password protection (variable PROT position 1 = R), only these variables will be populated.