
Library files ¹Available with CAMEL99 Forth

The best way to know what is in the library files is to read them. The comments should explain what is going on and in most cases there is also example code that you can use to try the features of the library yourself.

<i>File Name</i>	<i>Description</i>
3RD4TH	Fast move 3 rd or 4 th item to top of stack
80COL	F18 card only. Switch to 80 column mode
9902C	RS232 driver written in Forth
9902CODE	RS232 driver written in Forth Assembler (faster)
9902D	RS232 driver written in Forth with Assembler assistance
9902PRIM	RS232 driver translated to machine code. No assembler needed
ANSFILES	Standard ISO Forth file words
ASM9900	TMS9900 Forth Assembler
AUTOBAUD	RS232 automatic baud set experiment (not working)
AUTOMOTION	Automatic sprite motion like Extended BASIC
BASICHLP	Load file to include files needed for BASIC programmers
BFBLOCKS	Empty block file for use with DSK1.BLOCKS
BGSOUND	Play sound lists from CPU RAM in the background (multi-tasking)
BLOCKS	Create and Open Forth block file. (Like FbForth,TurboForth)
BLWP	Call subprograms that you write, from Forth
BOOLEAN	Create and manage arrays of bits. Very compact
BREAK	A word to emulate BASIC Fnct 4 key
BUFFER	Forth 2012 word to create a buffer
CALLCHAR	Interpreting word to convert a string to char pattern
CAMEL99	The CAMEL99 Forth Kernel. (8K bytes)
CASE	ANS/ISO Forth case statement
CATALOG	implements CAT to list the contents of a disk drive
CELLS	Shows implementation of Forth word CELLS (Now in DSK1.SYSTEM)
CHAR	Show implementaiton of CHARS. (Now is DSK1.SYSTEM)
CHARSET	Like X-BASIC. Restores default characters. Show GROM access
CLOSEALL	CLOSEs all open files. Includes DSK1.ANSFILES
CODE	Shows implementation of CODE, ENDCODE. (Now in DSK1.SYSTEM)
CODEMACROS	Tools to make fast data access macros and arrays
CONDCOMP	Implements conditional compilation words
COOLSPRITE	Demo program. Translation of BASIC to Forth example
CORE1	Hayes Forth compliance test program for Core words.
CRU, CRU2	Two flavours of CRU word set. CRU is smaller.
DATABYTE	Implements DATA and BYTE directives like Assmby Language
DEFER	Implements DEFER and IS for deferred word creation
DEV	Loads all files needed for program development
DIR	Load DIR to see a listing of the disk directory file names
DIRSPRIT	Implements "direct" Sprite control. (no automotion)
DOTLINES	.LINES can print the number of lines compiled in a file
DOUBLE	Double integer wordset for 32bit math
EASYFILE	Simplified file access words
ELAPSE	ELAPSE times the runtime of code up to 9 minutes
ENUM	Provides enumatorated CONSTANTS

^{1 1} New library files are added to the CAMEL99-V2 GITHUB repository so check the LIB.ITS folder for more tools and language extensions

<i>File Name</i>	<i>Description</i>
FASTCASE	Vector table creator. (similar to ON GOTO)
FILECOPY	COPY command to copy a DV80 file
FLOORED	Examples of floored and symmetrical division in Forth
GRAFIX	VCHAR,HCHAR and other words from TI-BASIC
HELLO	1 st program demonstration
HEXNUMBER	H# is a directive to force HEX number interpretation
HEXQUOTE	Converts a hex string to integers for character defintions
INCLUDE	Definition of INCLUDE. Part of DSK1.SYSTEM
INLINE	Compiler for inline code from the kernel. Speedup.
INPUT	Emulates BASIC INPUT command
ISRTEST	RS232 Interrupt routine test code.
LDCRSTCR	CRU commands from TI-Forth written for CAMEL99
LINEDIT	Simple line editor for use with block files.
LINEDIT80	Simple line editor for 80 column display
LINPUT	Emulates X-BASIC LINPUT command
LISTS	Words to create and manipulate lists
LOADSAVE	Words to LOAD and SAVE VDP memory very quickly
MARKER	Marks point in dictioary that can be removed
MORE	Display a DV80 file
MOTION	Words to manage direct sprite motion in your program
MSTAR	Forth word to multiply 2 integers with 32bit result
MTASK99	Multi-tasking system for CAMEL99 Forth
MTOOLS	Tools to examine tasks
NEEDFROM	Simple and small conditional compiling control
NEWBLOCKS	BLOCK file for use with BLOCKS
PARSNAME	Parse 1 piece of text
POLYSOUND	Experimental backgorund sound using interrupts for timing
PROG	Directive to create CODE words with their own workspace
QUASIV2	Sprite demonstration program
RANDOM	Random number generator
RKEY	Repeating key routine
SAMS	SAMS 1Mbyte memory card access in machine code
SAMS32	SAMS card using 32bit addressing
SAMS32BIT	SAMS card using 32bit addressing variation
SAMSFTH	SAMS card access written in only Forth
SEARCH	Forth 2012 SEARCH word implementation
SEE	Forth decompiler
SMPLSND	Minimal code for sound chip control
SMPTE	Demo Colour Bars howing Graphics mode
SNDCOMP	Sound compiler builds sound lists from text commands
SOUND	Standard CAMEL99 Sound control lexicon
SQUOTE	Forth 2012 extension to S" allows multiple strings per line
START	The first file that CAMEL99 reads when it starts
STOD	"single to double" converts 16 bit no, to 32bit number (signed)
STRINGS	Gives string commands similar to TI-BASIC
STRUC12	Forth 2012 data structure words
SYNONYM	Allows creation of different words with same function
SYSTEM	Loaded by START to add final Forth CORE words to the system

*File Name**Description*

TARGLOOPS	Implements Forth Loops and IF/ELSE/THEN. *TEACHING FILE*
TIRAND	TI-FORTH random number generator if you need it
TOOLS	Programmers tools DUMP, .S WORDS etc.
TRACE	TRACE utility adapted from TI-Forth
TRAILING	Strip trailing spaces from a string. Also -LEADING & TRIM
TRIG	Trig functions using lookup table
TTY1	Terminal on RS232 code. (no tested)
UDOTR	"Un-signed dot R", prints numbers right-justified
VALUES	VALUES are like constants that can be changed
VBYTEQ	Implement a circular byte queue in VDP RAM
VDPBGSND	Built sound lists in VDP RAM with Multi-tasking player
VDPDOTQ	VDP dot quote: builds text strings VDP RAM to save space
VDPEXTRA	Machine code routines used by TTY Forth
VDPEXTRAS	Same as VDPextra but with Assembly source code
VDPMEM	VDP memory manager word
VDPSAVE	Generic LOAD and SAVE VDP ram at high speed
VDPSOUND	VDP sound list creation with play. NON-Multi-tasking
VDPSTRNG	VDP memory based string library. Saves CPU RAM use
VDPATYPE	Faster type to text on screen displays
VECTARIO	Example of Vectoring I/O in Forth (untested)
VT100	VT100 terminal control for RS232 TTY Forth