

Forth-2012 vs. StrongForth 3.1 Cross Reference

Core Word Set

Forth-2012	StrongForth	Remarks
!	!	Overloaded.
#	#	
#>	#>	
#S	#s	
'	'	Returns a definition instead of an execution token.
(\	Extended semantics. Use (for stack diagrams only.
*	*	Overloaded.
* /	* /	Overloaded.
* /MOD	* /mod	Overloaded.
+	+	Overloaded. Performs address arithmetic.
+ !	+ !	Overloaded. Performs address arithmetic.
+LOOP	+loop	Performs address arithmetic.
,	,	Overloaded. Can be applied to all memory spaces.
–	–	Overloaded. Performs address arithmetic.
.	.	Overloaded.
. "	. "	Overloaded versions for interpretation and compilation.
/	/	Overloaded.
/MOD	/mod	Overloaded.
0<	0<	Overloaded.
0=	0=	Overloaded.
1+	1+	Overloaded. Performs address arithmetic.
1–	1–	Overloaded. Performs address arithmetic.
2 !	!	Applies to double-cell items. For pairs of single-cell items, use tuck ! 1+ ! instead.
2 *	2 *	Overloaded. Applies to numbers.
	LSHIFT	Overloaded. Applies to logical values.

2/	2/	Overloaded. Applies to numbers.
	RSHIFT	Overloaded. Applies to logical values.
2@	@	Applies to double-cell items. For pairs of single-cell items, use <code>dup 1+ @ swap @</code> instead.
2DROP	drop	Overloaded. Applies to double-cell items. For pairs of single-cell items, use <code>drop drop</code> instead.
2DUP	dup	Overloaded. Applies to double-cell items. For pairs of single-cell items, use <code>over over</code> instead.
2OVER	over	Overloaded. Applies to double-cell items. For pairs of single-cell items consider using locals.
2SWAP	swap	Overloaded. Applies to double-cell items. For pairs of single-cell items consider using locals.
:	:	
;	;	
<	<	Overloaded.
<#	<#	
=	=	Overloaded.
>	>	Overloaded.
>BODY	>body	Applies to a definition instead of an execution token. Returns a null address if the definition was not defined with <code>create</code> .
>IN	>in	Overloaded.
>NUMBER	>number	
>R	>r	Creates and initializes a local named <code>r@</code> .
?dup		Not supported by StrongForth. Ambiguous stack diagram.
@	@	Overloaded.
ABORT	abort	Extended semantics according to the exception extension word set.
ABORT"	abort"	Extended semantics according to the exception extension word set.
ABS	abs	Overloaded.
ACCEPT	accept	This is a deferred definition.
ALIGN	align	Overloaded. Can be applied to all memory spaces.

ALIGNED	aligned	Overloaded.
ALLOT	allot	Overloaded. Can be applied to all memory spaces.
AND	and	Overloaded.
BASE	base	
BEGIN	begin	
BL	bl	
C!	!	Overloaded.
C,	c,	Overloaded. Can be applied to all memory spaces.
C@	@	Overloaded.
CELL+	l+	Overloaded. Performs address arithmetic.
CELLS	cells	
CHAR	char	
CHAR+	l+	Overloaded. Performs address arithmetic.
CHARS	chars	
CONSTANT	constant	Overloaded.
COUNT	count	To be included from <code>strex.t.sf</code> .
CR	cr	
CREATE	create	Requires a stack diagram. Applies to the default memory space.
DECIMAL	decimal	
DEPTH		Not supported by StrongForth.
DO	do	
DOES>	does>	Must be succeeded by a stack diagram.
DROP	drop	Overloaded.
DUP	dup	Overloaded.
ELSE	else	
EMIT	emit	
	.	Overloaded. Only for data type character.
ENVIRONMENT?		Not supported in StrongForth.
EVALUATE	evaluate	
EXECUTE	execute	Overloaded. Individually created by <code>)procreates</code> . Each version applies to one specific subtype of token.
EXIT	exit	Does not require <code>unloop</code> when used inside <code>do</code> loops.

FILL	fill	Overloaded.
FIND		Not supported by StrongForth. Can be substituted by <code>search-context</code> .
FM/MOD	fm/mod	
HERE	here	Overloaded. Can be applied to all memory spaces.
HOLD	hold	Overloaded.
I	i	A local dynamically generated by <code>do</code> and <code>?do</code> . Removed from the local vocabulary by <code>loop</code> , <code>+loop</code> and <code>-loop</code> .
IF	if	
IMMEDIATE	immediate	
INVERT	invert	Overloaded.
J	j	A local dynamically generated by <code>do</code> and <code>?do</code> . Removed from the local vocabulary by <code>loop</code> , <code>+loop</code> and <code>-loop</code> .
KEY	key	
LEAVE	leave	
LITERAL	literal	Overloaded.
LOOP	loop	Performs address arithmetic.
LSHIFT	lshift	Overloaded with an additional version for single bit shift.
M*	m*	Overloaded.
MAX	max	Overloaded.
MIN	min	Overloaded.
MOD	mod	Overloaded.
MOVE	move	Overloaded.
NEGATE	negate	Overloaded.
OR	or	Overloaded.
OVER	over	Overloaded.
POSTPONE	postpone	
QUIT	quit	
R>	r>	Removes local <code>r@</code> .
R@	r@	A local dynamically created by <code>>r</code> and removed by <code>r></code> .
RECURSE	recurse	
REPEAT	repeat	
ROT	rot	Overloaded.

RSHIFT	rshift	Overloaded with an additional version for single bit shift.
S"	"	Name changed because counted strings are not supported by StrongForth. Overloaded versions for interpretation and compilation.
S>D	s>d	Overloaded.
SIGN	sign	Expects a signed-double parameter.
SM/REM	sm/rem	
SOURCE	source	Overloaded.
SPACE	space	
SPACES	spaces	
STATE	state	
SWAP	swap	Overloaded.
THEN	then	
TYPE	type	Overloaded.
U.	.	Overloaded.
U<	<	Overloaded.
UM*	m*	Overloaded.
UM/MOD	m/mod	Overloaded.
UNLOOP		Not supported by StrongForth. Loop parameters are locals.
UNTIL	until	
VARIABLE	variable	Overloaded. Requires an initialization value.
WHILE	while	
WORD		Counted Strings are not supported by StrongForth. Can be replaced by parse.
XOR	xor	Overloaded.
[[
[']	[']	
[CHAR]	[char]	
]]	

Core Extension Word Set

Forth-2012	StrongForth	Remarks
. (. (Overloaded versions for interpretation and compilation.
.R	.r	Overloaded.
0<>	0<>	Overloaded.
0>	0>	Overloaded.
2>R	>r	Creates and initializes a local named r@. Applies to double-cell items. For pairs of single-cell items, use >r >r.
2R>	r>	Removes local r@. Applies to double-cell items. For pairs of single-cell items, use r> r>.
2R@	r@	A local dynamically created by >r and removed by r>. Applies to double-cell items.
:NONAME	:noname	Returns a definition instead of an execution token.
<>	<>	Overloaded.
?DO	?do	
ACTION-OF	action-of	Overloaded versions for interpretation and compilation.
AGAIN	again	
BUFFER:	buffer:	Requires a stack diagram. Applies to the default memory space.
C"		Counted strings are not supported by StrongForth.
CASE	case	
COMPILE,	compile,	Applies to a definition instead of an execution token.
DEFER	defer	Requires a stack diagram.
DEFER!	defer!	Applies to a definition instead of an execution token.
DEFER@	defer@	Applies to a definition instead of an execution token.
ENDCASE	endcase	Does not discard the case selector.
ENDOF	endof	
ERASE	erase	Overloaded. Performs address arithmetic.
FALSE	false	
HEX	hex	

HOLDS	hold	Overloaded.
IS	is	Overloaded versions for interpretation and compilation. Applies to a definition instead of an execution token.
MARKER	marker	
NIP	nip	Overloaded.
OF	of	
PAD	pad	
PARSE	parse	
PARSE-NAME	parse-name	
PICK		Not supported by StrongForth.
REFILL	refill	Overloaded.
RESTORE-INPUT	restore-input	Overloaded. Expects an input stream object on the stack.
ROLL		Not supported by StrongForth.
S\"	\"	Name changed because counted strings are not supported by StrongForth. Overloaded versions for interpretation and compilation. To be included from <code>escape.sf</code> .
SAVE-INPUT	save-input	Overloaded. Returns an input stream object.
SOURCE-ID		Not supported by StrongForth.
TO	to	Overloaded versions for interpretation and compilation.
TRUE	true	
TUCK	tuck	Overloaded.
U.R	.r	Overloaded.
U>	>	Overloaded.
UNUSED	unused	Can be applied to all memory spaces.
VALUE	value	Overloaded.
WITHIN	within	Overloaded.
[COMPILE]	[compile]	
\	\	Extended semantics.

Block Word Set

To be included from `block.sf`.

Forth-2012	StrongForth	Remarks
BLK	blk	A public member of the <code>block-input-stream</code> class.
BLOCK	block	
BUFFER	buffer	
EVALUATE		Requires no additional semantics.
FLUSH	flush	Overloaded.
LOAD	load	
SAVE-BUFFERS	save-buffers	
UPDATE	update	

Block Extension Word Set

To be included from `block.sf`.

Forth-2012	StrongForth	Remarks
EMPTY-BUFFERS	empty-buffers	
LIST	list	
REFILL	refill	Overloaded.
SCR	scr	
THRU	thru	
\	\	Requires no additional semantics.

Double-Number Word Set

Forth-2012	StrongForth	Remarks
2CONSTANT	constant	Overloaded. Applies to double-cell items, not to pairs of single-cell items.
2LITERAL	literal	Overloaded. Applies to double-cell items, not to pairs of single-cell items.
2VARIABLE	variable	Overloaded. Applies to double-cell items, not to pairs of single-cell items. Requires an initialization value.
D+	+	Overloaded.
D-	-	Overloaded.
D.	.	Overloaded.
D.R	.r	Overloaded.
D0<	0<	Overloaded.
D0=	0=	Overloaded.
D2*	2*	Overloaded.
D2/	2/	Overloaded.
D<	<	Overloaded.
D=	=	Overloaded.
D>S	d>s	Overloaded.
DABS	abs	Overloaded.
DMAX	max	Overloaded.
DMIN	min	Overloaded.
DNEGATE	negate	Overloaded.
M*/	*/	Overloaded.
M+	+	Overloaded.

Double-Number Extension Word Set

Forth-2012	StrongForth	Remarks
2ROT	rot	Applies to double-cell items, not to pairs of single-cell items.
2VALUE	value	Applies to double-cell items, not to pairs of single-cell items.
DU<	<	Overloaded.

Exception Word Set

Forth-2012	StrongForth	Remarks
CATCH	catch	Compilation only. Different semantics.
THROW	throw	

Exception Extension Word Set

Forth-2012	StrongForth	Remarks
ABORT	abort	
ABORT"	abort"	

Facility Word Set

Forth-2012	StrongForth	Remarks
AT-XY	at-xy	
KEY?	key?	
PAGE	page	

Facility Extension Word Set

Some of the words related to structures are to be included from `struct.sf`.

Forth-2012	StrongForth	Remarks
+FIELD	smember	Applied to structure members only. Expects the data type of the structure on the stack. To be included from <code>struct.sf</code> .
BEGIN-STRUCTURE	begin-structure	To be included from <code>struct.sf</code> .
CFIELD:	cmember	Expects a prototype of the member's data type on the stack.
EKEY	ekey	
EKEY>CHAR	ekey>char	
EKEY>FKEY	ekey>fkey	
EKEY?	ekey?	
EMIT?	emit?	Always returns TRUE.
END-STRUCTURE	end-structure	To be included from <code>struct.sf</code> .

FIELD:	member	Overloaded. Expects a prototype of the member's data type on the stack.
K-ALT-MASK	k-alt-mask	
K-CTRL-MASK	k-ctrl-mask	
K-DELETE	k-delete	
K-DOWN	k-down	
K-END	k-end	
K-F1	k-F1	
K-F10	k-F10	
K-F11	k-F11	
K-F12	k-F12	
K-F2	k-F2	
K-F3	k-F3	
K-F4	k-F4	
K-F5	k-F5	
K-F6	k-F6	
K-F7	k-F7	
K-F8	k-F8	
K-F9	k-F9	
K-HOME	k-home	
K-INSERT	k-insert	
K-LEFT	k-left	
K-NEXT	k-next	
K-PRIOR	k-prior	
K-RIGHT	k-right	
K-SHIFT-MASK	k-shift-mask	
K-UP	k-up	
MS	ms	Granularity is 1 millisecond.
TIME&DATE	time&date	

File-Access Word Set

Forth-2012	StrongForth	Remarks
(\	Extended semantics. Use (for stack diagrams only.
BIN	bin	No operation.
CLOSE-FILE	close	Throws an exception instead of returning an I/O result code.
CREATE-FILE	create	Overloaded. Throws an exception instead of returning an I/O result code.
DELETE-FILE	delete	Overloaded. Throws an exception instead of returning an I/O result code.
FILE-POSITION	position	Throws an exception instead of returning an I/O result code.
FILE-SIZE	size	Overloaded. Throws an exception instead of returning an I/O result code.
INCLUDE-FILE	include	Overloaded.
INCLUDED	include	Overloaded.
OPEN-FILE	open	Throws an exception instead of returning an I/O result code.
R/O	r/o	
R/W	r/w	
READ-FILE	read	Throws an exception instead of returning an I/O result code.
READ-LINE	read-line	Throws an exception instead of returning an I/O result code.
REPOSITION-FILE	reposition	Throws an exception instead of returning an I/O result code.
RESIZE-FILE	resize	Overloaded. Throws an exception instead of returning an I/O result code.
S"	"	Name changed because counted strings are not supported. Overloaded versions for interpretation and compilation.
SOURCE-ID		Not supported by StrongForth. Consider using default-input-source as a replacement.
W/O	w/o	
WRITE-FILE	write	Throws an exception instead of returning an I/O result code.
WRITE-LINE	write-line	Throws an exception instead of returning an I/O result code.

File-Access Extension Word Set

Forth-2012	StrongForth	Remarks
FILE-STATUS	status	Throws an exception instead of returning an I/O result code.
FLUSH-FILE	flush	Overloaded. Throws an exception instead of returning an I/O result code.
INCLUDE	include	Overloaded.
REFILL	refill	Overloaded
RENAME-FILE	rename	Throws an exception instead of returning an I/O result code.
REQUIRE	require	Overloaded.
REQUIRED	require	Overloaded.
S\"	\"	Name changed because counted strings are not supported. Overloaded versions for interpretation and compilation. To be included from <code>escape.sf</code> .

Floating-Point Word Set

Some words have to be included from `float.sf`.

Forth-2012	StrongForth	Remarks
>FLOAT	>float	Always returns a floating-point number.
D>F	d>f	Overloaded.
F!	!	Overloaded.
F*	*	Overloaded.
F+	+	Overloaded.
F-	-	Overloaded.
F/	/	Overloaded.
F0<	0<	Overloaded.
F0=	0=	Overloaded.
F<	<	Overloaded.
F>D	f>d	
F@	@	Overloaded.
FALIGN	falign	Can be applied to all memory spaces.
FALIGNED	faligned	
FCONSTANT	constant	Overloaded.
FDEPTH	fdepth	

FDROP	drop	Overloaded.
FDUP	dup	Overloaded.
FLITERAL	literal	Overloaded.
FLOAT+	1+	Overloaded. Performs address arithmetic.
FLOATS	floats	
FLOOR	floor	
FMAX	max	Overloaded.
FMIN	min	Overloaded.
FNEGATE	negate	Overloaded.
FOVER	over	Overloaded.
FROT	rot	Overloaded.
FROUND	round	
FSWAP	swap	Overloaded.
FVARIABLE	variable	Overloaded. Requires initialization value.
REPRESENT	represent	

Floating-Point Word Extension Set

Some words have to be included from `float.sf`.

Forth-2012	StrongForth	Remarks
DF!	!	Overloaded.
DF@	@	Overloaded.
DFALIGN	dfalign	
DFALIGNED	dfaligned	
DFFIELD:	dfmember	Expects a prototype of the member's data type on the stack.
DFLOAT+	1+	Overloaded. Performs address arithmetic.
DFLOATS	dfloats	
F**	**	
F.	.	Overloaded.
F>S	f>s	
FABS	abs	Overloaded.
FACOS	acos	
FACOSH	acosh	
FALOG	alog	
FASIN	asin	

FASINH	asinh	
FATAN	atan	
FATAN2	atan2	
FATANH	atanh	
FCOS	cos	
FCOSH	cosh	
FE.	e.	
FEXP	exp	
FEXPM1	expm1	
FFIELD:	member	Overloaded. Expects a prototype of the member's data type on the stack.
FLN	ln	
FLNP1	lnp1	
FLOG	log	
FS.	s.	
FSIN	sin	
FSINCOS	sincos	
FSINH	sinh	
FSQRT	sqrt	
FTAN	tan	
FTANH	tanh	
FTRUNC	trunc	
FVALUE	value	Overloaded.
F~	~	
PRECISION	precision	Implemented as a value.
S>F	s>f	Overloaded.
SET-PRECISION	set-precision	
SF!	!	Overloaded.
SF@	@	Overloaded.
SFALIGN	sfalign	
SFALIGNED	sfaligned	
SFFIELD:	sfmember	Expects a prototype of the member's data type on the stack.
SFLOAT+	1+	Overloaded. Performs address arithmetic.
SFLOATS	sfloats	

Locals Word Set

Forth-2012	StrongForth	Remarks
(LOCAL)	(local)	
TO	to	Overloaded.

Locals Extension Word Set

Forth-2012	StrongForth	Remarks
LOCALS	locals	
{ :		Not supported by StrongForth, because the syntax conflicts with StrongForth's way to specify stack diagrams. Use <code>locals </code> to define initialized locals.

Memory-Allocation Word Set

Forth-2012	StrongForth	Remarks
ALLOCATE	allocate	Throws an exception instead of returning an I/O result code.
FREE	free	Throws an exception instead of returning an I/O result code.
RESIZE	resize	Overloaded. Throws an exception instead of returning an I/O result code.

Programming-Tools Word Set

Forth-2012	StrongForth	Remarks
.S	.s	Displays data types instead of stack values.
?	?	
DUMP	dump	Overloaded.
SEE	see	Overloaded.
WORDS	words	Extended semantics.

Programming-Tools Extension Word Set

Forth-2012	StrongForth	Remarks
<code>;CODE</code>	<code>;code</code>	
<code>AHEAD</code>	<code>ahead</code>	
<code>ASSEMBLER</code>	<code>assembler</code>	
<code>BYE</code>	<code>bye</code>	Overloaded.
<code>CODE</code>	<code>code</code>	
<code>CS-PICK</code>		Not supported by StrongForth. Control-flow information is stored on the data stack.
<code>CS-ROLL</code>		Not supported by StrongForth. Control-flow information is stored on the data stack.
<code>EDITOR</code>	<code>editor</code>	To be included from <code>editor.sf</code> .
<code>FORGET</code>	<code>forget</code>	
<code>N>R</code>		Not supported by StrongForth.
<code>NAME>COMPILE</code>		Not supported by StrongForth.
<code>NAME>INTERPRET</code>		Not supported by StrongForth.
<code>NAME>STRING</code>	<code>name</code>	
<code>NR></code>		Not supported by StrongForth.
<code>STATE</code>	<code>state</code>	
<code>SYNONYM</code>		Not supported by StrongForth.
<code>TRAVERSE-WORDLIST</code>		Not supported by StrongForth. Can be substituted by <code>search</code> .
<code>[DEFINED]</code>	<code>[defined]</code>	
<code>[ELSE]</code>	<code>[else]</code>	
<code>[IF]</code>	<code>[if]</code>	
<code>[THEN]</code>	<code>[then]</code>	
<code>[UNDEFINED]</code>	<code>[undefined]</code>	

Search-Order Word Set

Some words are to be included from `order.sf`.

Forth-2012	StrongForth	Remarks
DEFINITIONS	definitions	
FIND		Counted Strings are not supported by StrongForth. Can be replaced by <code>search-context</code> .
FORTH-WORDLIST	forth-vocabulary	To be included from <code>order.sf</code> .
GET-CURRENT	get-current	To be included from <code>order.sf</code> .
GET-ORDER	get-order	Returns an object of class <code>search-order</code> . To be included from <code>order.sf</code> .
SEARCH-WORDLIST	search	Has two additional input parameters to specify additional search criteria. Always returns a definition and a flag.
SET-CURRENT	set-current	To be included from <code>order.sf</code> .
SET-ORDER	set-order	Expects an object of class <code>search-order</code> . To be included from <code>order.sf</code> .
WORDLIST	wordlist	Different semantics.

Search-Order Extension Word Set

Forth-2012	StrongForth	Remarks
ALSO	also	No semantics needed. To be included from <code>order.sf</code> .
FORTH	forth	<code>forth</code> combines the semantics of <code>ALSO</code> <code>FORTH</code> .
ONLY	only	To be included from <code>order.sf</code> .
ORDER	order	
PREVIOUS	ignore	

String Word Set

Forth-2012	StrongForth	Remarks
-TRAILING	-trailing	Overloaded.
/STRING	/string	Overloaded.
BLANK	blank	
CMOVE	cmove	
CMOVE>	cmove>	
COMPARE	compare	
SEARCH	search	Overloaded.
SLITERAL	sliteral	

String Extension Word Set

To be included from `strexst.sf`.

Forth-2012	StrongForth	Remarks
REPLACES	replaces	Overloaded.
SUBSTITUTE	substitute	Overloaded. Throws an exception instead of returning a negative value.
UNESCAPE	unescape	Overloaded. Expects additional buffer length parameter and throws an exception on buffer overrun.