

# ATARI® MACRO ASSEMBLER REFERENCE CARD

## PSEUDO-OP QUICK REFERENCE

iglab	<b>ASSERT</b>	<exp>	;Check assembly condition
LABEL:	<b>DB</b>	<exp>, <exp>	;Define bytes
LABEL:	<b>DB</b>	'ABCDE', 'f', \$0D	;Define long strings
LABEL:	<b>DC</b>	'ABCDE'	;DB with 80h added onto the last byte
LABEL:	<b>DS</b>	<exp>	;Define space
LABEL:	<b>DW</b>	<exp>, <exp>	;Define words
LABEL:	<b>DW</b>	'Xu', 1234, 'y'	;Define 1- or 2-character strings
LABEL:	<b>ECHO</b>	<exp>	;Duplicate code <exp> times
iglab	<b>EJECT</b>		;Page eject
iglab	<b>ELSE</b>		;Part of conditional assembly
LABEL:	<b>END</b>	[exp]	;End of assembly
iglab	<b>ENDIF</b>		;Terminate range of IF
iglab	<b>ENDM</b>		;Terminate MACRO or ECHO
iglab	<b>EPROC</b>		;Terminates local symbol range
LABEL:	<b>EQU</b>	<exp>	;Define LABEL equals <exp>
iglab	<b>ERR</b>		;Force error flag
iglab	<b>IF</b>	<exp>	;Begin conditional assembly
LABEL:	<b>INCLUDE</b>	<filespec>	;Include another source file
iglab	<b>LINK</b>	<filespec>	;Include another source file at the end of this source file
iglab	<b>LIST</b>	<opt>	; <opt> = list control option
iglab	<b>LIST</b>	*	;Pop list control stack
LABEL:	<b>LOC</b>	<exp>	;Set location counter
NAME:	<b>MACRO</b>	<parms>	;Begin macro definition
LABEL:	<b>ORG</b>	<exp>	;Set origin counter
LABEL:	<b>PROC</b>		;Begin local symbol range
LABEL:	<b>REAL6</b>	<exp>	;6-byte real constant conversion
LABEL:	<b>SET</b>	<exp>	;Reset LABEL to <exp>
iglab	<b>SPACE</b>	<exp1>, <exp2>	;Space <exp1> lines if <exp2> lines left on this page
iglab	<b>SUBTTL</b>	'text'	;Set listing subtitle
iglab	<b>TITLE</b>	'text'	;Set listing title
iglab	<b>USE</b>	<name>	;Use block declaration

LABEL: **VFD** <exp>\<exp> ;Variable field definition

LABEL: **=** <exp> ;Synonym for EQU

<exp> = **required expression**

[exp] = **optional expression**

<filespec> = <device> : <filename> . <extension>

iglab = **ignored label**

'text' = **strings**

## ERROR CODES

**A** = Address error. Instruction specified does not support the addressing mode specified.

**D** = Duplicate label error. The last one defined is used.

**E** = Expression error. An expression on the source line in the address field is unrecognizable.

**F** = Bad nesting of control statements. Bad nesting of IF/ELSE/ENDIF statements. When this occurs on the END line, means an IF was not terminated.

**I** = Instruction field not recognized. Three NOP bytes are generated.

**L** = Label field not recognized. Three NOP bytes are generated.

**M** = MACRO statement error. Improper macro definition.

**N** = Error in number: digit exceeds radix, value exceeds 16 bits, and so forth.

**O** = Stack table overflow occurred in evaluating expression; user should simplify expression. Too many LINK files. Too many PROCs. Too many USE blocks.

**P** = Programmer forced error. See ASSERT and ERR pseudo-ops.

**R** = Expression in variable field not computable.

**S** = Syntax error in statement. Too many or too few address subfields.

**U** = Reference to an undefined symbol.

**V** = Expression overflow, resultant value is truncated.

**W** = Not within VFD field width (1 <= width <= 16).

**Y** = Misplaced instruction, extraneous ENDM. When this occurs on the END line, means a MACRO or ECHO was not terminated.