

Description	Mnemonic	Operands	Addressing Modes	Status Bits	Modifies	Corrupts
Stop execution	0 STOP					
Return from CALL	0 RET				SP	
Return from trap	0 RETR					
Move SP to A	0 MOVSPA				A	
Move NZVC flags to A _{12:15}	0 MOVFLGA				A	
Move A _{12:15} to NZVC flags	0 MOVAFLG					
Bitwise invert r	0 NOTr			NZ	r	
Negate r	0 NEGr			NZV	r	
Arithmetic shift left r	0 ASLr			NZVC	r	
Arithmetic shift right r	0 ASRr			NZC	r	
Rotate left r	0 ROLr			C	r	
Rotate right r	0 RORr			C	r	
Branch unconditional	0 BR	label	i,x			
Branch if less than or equal	0 BRLE	label	i,x			
Branch if less than	0 BRLT	label	i,x			
Branch if equal to	0 BREQ	label	i,x			
Branch if not equal to	0 BRNE	label	i,x			
Branch if greater than or	0 BRGE	label	i,x			
Branch if greater than	0 BRGT	label	i,x			
Branch if overflow	0 BRV	label	i,x			
Branch if Carry	0 BCR	label	i,x			
Call subprogram	0 CALL	label	i,x		SP	
Unary no operation trap	0 NOPn					
Nonunary no operation trap	0 NOP		i			
Decimal input trap	0 DECI	m,ams	d,n,s,sf,x,sx,sfx	NZV	m	
Decimal output trap	0 DECO	m,ams	i,d,n,s,sf,x,sx,sfx			
Hexadecimal output trap	0 HEXO	m,ams	i,d,n,s,sf,x,sx,sfx			
String output trap	0 STRO	m,ams	d,n,s,ssf,x			
Add to stack pointer	0 ADDSP	m,ams	i,d,n,s,ssf,x,sx,sfx	NZVC	SP	
Subtract from stack pointer	0 SUBSP	m,ams	i,d,n,s,ssf,x,sx,sfx	NZVC	SP	
Add to r	0 ADDR	m,ams	i,d,n,s,ssf,x,sx,sfx	NZVC	r	
Subtract from r	0 SUBR	m,ams	i,d,n,s,ssf,x,sx,sfx	NZVC	r	
Bitwise AND to r	0 ANDR	m,ams	i,d,n,s,ssf,x,sx,sfx	NZ	r	
Bitwise OR to r	0 ORR	m,ams	i,d,n,s,ssf,x,sx,sfx	NZ	r	
Compare r _{0:15} to word	0 CPWr	m,ams	i,d,n,s,ssf,x,sx,sfx	NZVC		
Compare r _{8:15} to byte	0 CPBr	m,ams	i,d,n,s,ssf,x,sx,sfx	NZVC		
Load word r _{0:15} from memory	0 LDWr	m,ams	i,d,n,s,ssf,x,sx,sfx	NZ	r _{0:15}	
Load byte r _{8:15} from memory	0 LDBr	m,ams	i,d,n,s,ssf,x,sx,sfx	NZ	r _{8:15}	
Store word r _{0:15} to memory	0 STWr	m,ams	d,n,s,ssf,x,sx,sfx		m	
Store byte r _{8:15} to memory	0 STBr	m,ams	d,n,s,ssf,x,sx,sfx		m	
Description	Directive					
The address of a symbol	0 .ADDRSS	label				
Padding to align at boundary	0 .ALIGN	number				
A string of ASCII bytes	0 .ASCII	string				
A block of bytes	0 .BLOCK	number				
Initiate ROM burn	0 .BURN					
A byte value	0 .BYTE	number				
The sentinel for the	0 .END					
Equate a symbol to a	0 .EQUATE	number				
number	0 .WORD	number				

Description		Directive				
Include file at this point	1	.INCLUDE	"fid"			
Append file at the end	1	.APPEND	"fid"			
Declare with global scope	1	.GLOBAL	label			
Begin a macro definition	1	.MACRO				
End a macro definition	1	.MACROEND				
Description	Mnemonic	Operands	Addressing	Status	Modifies	Corrupts
Branch if N	2	BRN	label			
Branch if not N	2	BRNN	label			
Branch if Z	2	BRZ	label			
Branch if not Z	2	BRNZ	label			
Branch if not oVerflow	2	BRNV	label			
Branch if not Carry	2	BRNC	label			
Clear word r _{0:15}	2	CLRWr		NZ	r	
Clear byte r _{8:15}	2	CLRB_r		NZ	r _{8:15}	
Clear word memory	2	CLRW	m, ams		m	NZVC
Clear byte memory	2	CLRB	m, ams		m	NZVC
Increment r	2	INCr		NZVC	r	
Decrement r	2	DEC_r		NZVC	r	
Increment memory	2	INC	m, ams		m	NZVC
Decrement memory	2	DEC	m, ams		m	NZVC
Bitwise invert memory	2	NOT	m, ams		m	NZVC
Negate memory	2	NEG	m, ams		m	NZVC
Add; m ← m + addend	2	ADD	m, ams, addend, ams2		m	NZVC
Subtract; m ← m - subend	2	SUB	m, ams, subend, ams2		m	NZVC
Move; destin ← source	2	MOVE	source, ams, destin, ams2		destin	NZVC
Compare word memory	2	CPW	m1, ams, m2, ams2	NZVC	A	
Compare byte memory	2	CPB	m1, ams, m2, ams2	NZVC	A	
Test (compare to zero) r _{0:15}	2	TSTWr		NZVC		
Test (compare to zero) r _{8:15}	2	TSTB_r		NZVC		
Test word memory	2	TSTW	m, ams	NZVC	A	
Test byte memory	2	TSTB	m, ams	NZVC	A	
PUSH r	2	PUSH_r			SP	NZVC
POP r	2	POPr			SP, r	NZVC
PUSH memory	2	PUSH	m, ams		SP	NZVC
POP memory	2	POP	m, ams		SP, m	NZVC
Character Input	2	CHARI	m, ams			
Character Output	2	CHARO	m, ams			
String Input ¹ to memory	2	STRI¹	m, ams		m ² , A ²	NZVC
Decimal Input r	2	DECIR			r	NZVC
Decimal Output r	2	DECOR				
Binary Output r	2	BINOR				NZVC
Binary Output memory	2	BINO	m, ams			NZVC
Hexadecimal Output r	2	HEXOR				NZVC
Dump Stack (top portion)	2	DUMPS	m, ams			NZVC
Statically save r	2	SAVER³				
Statically save A, X	2	SAVE⁴				
Restore saved r	2	RESTORE_r³			r	NZVC
Restore saved A, X	2	RESTORE⁴			A, X	NZVC

¹ Memory operand must reference a "String Object" with a capacity value stored in the "before byte descriptor".

² The referenced "String Object" is modified. Also, A is corrupted such that it contains the count of the number of characters read but truncated from the object's result due to unavailable capacity. Thus, a zero value in A indicates that the entire input has been stored in the string.

³ SAVER and RESTORE are complementary matched operations.

⁴ SAVE and RESTORE are complementary matched operations.