

Instruction	Modifier	First operand	Second operand	Remark
<u>DATA TRANSFER Instructions</u>				
LOAD	byte/word	memory address - direct, indirect, or indexed	register	
STORE	byte/word	memory address - direct, indirect, or indexed	register	
MOV	byte/word	source - register or immediate	destination – register	
IN		port number	register	one byte input
OUT		port number	register	one byte output
<u>ARITHMETIC & LOGIC Instructions</u>				
ADD	byte/word	source - register or immediate	destination - register	
SUB	byte/word	source - register or immediate	destination - register	
AND	byte/word	source - register or immediate	destination - register	
OR	byte/word	source - register or immediate	destination - register	
XOR	byte/word	source - register or immediate	destination - register	
NOT	byte/word	register		unary operation
SHIFT	byte/word, left/right, with/without carry	register	number of bits	unary operation
<u>COMPARISON Instruction</u>				
COMP	byte/word	source - register or immediate	destination - register	
<u>TRANSFER OF CONTROL Instructions</u>				
JMP		destination address – direct		
<i>Jflag</i>		destination address – direct		<i>flag: Z, N, O, C or P</i>
<i>JNflag</i>		destination address – direct		<i>flag: Z, N, O, C or P</i>
<i>Jcondition</i>		destination address – direct		<i>condition: GT, GE, LT, LE, EQ or NE</i>
CALL		destination address – direct		
RET				
<u>MISCELLANEOUS Instruction</u>				
HALT				