

	two complement overflow	flash write enable bit	half carry / flow error	interrupt mask	negative	zero	carry	running state	waiting state		
	Flags										
mnemonic	V	F	H	I	N	Z	C	R	W	param	description
WAIT										<i>imm16</i>	wait <i>imm16</i> 256Hz
CALL										<i>addr16</i>	push current Program Counter and branch to location
JMP										<i>addr16</i>	unconditional branch to location
RET										-	return to caller: pop lp (pointer to locals) and pop pc
NOP										-	no operation; if this instruction is the first at \$0000, autostart is active
CLRC							0			-	
SETC							1			-	
END								0		-	
GROW										-	adjust value in stack to one byte wider (push 0)
GROWS										-	adjust signed value in stack to one byte wider: push 0 or push \$ff
SHRINK										-	adjust value in stack to one byte smaller (AIS 1)
SHRINKS										-	adjust signed value in stack to one byte smaller: AIS 1 and value = \$80
SJMP											JMP to WORD address retrieved from stack
BRA										<i>rel8</i>	unconditional branch to relative location
BRN										<i>rel8</i>	branch never
BHI						x	x			<i>rel8</i>	branch if higher (C Z =0)
BLS						x	x			<i>rel8</i>	branch if lower or same (C Z =1)
BCC							x			<i>rel8</i>	branch if carry clear(BCC) / branch if higher or same(BHS) (C=0)
BCS							x			<i>rel8</i>	branch if carry set(BCS) / branch if lower(BLO) (C=1)
BNE						x				<i>rel8</i>	branch if not equal (Z=0)
BEQ						x				<i>rel8</i>	branch if equal (Z=1)
BHCC			x							<i>rel8</i>	branch if HALF carry clear (H=0) (half carry is also err flag for ECMD & seq)
BHCS			x							<i>rel8</i>	branch if HALF carry set (H=1) (half carry is also err flag for ECMD & seq)
BPL					x					<i>rel8</i>	branch if plus (N=0)
BMI					x					<i>rel8</i>	branch if minus (N=1)
BGE	x				x					<i>rel8</i>	branch if greater or equal (N=0) ?V
BLT	x					x				<i>rel8</i>	branch if less than Z^V
BGT	x				x	x				<i>rel8</i>	branch if greater (N=0 & Z=0) ?V
BLE	x				x	x				<i>rel8</i>	branch if less or equal N (Z^V)
PUSHLA										<i>var</i>	push the resolved address of Local variable to the stack
AIS										<i>imm8</i>	signed value, positive free space on stack, negative allocate space on stack
SUSPEND								0		<i>imm8</i>	suspend execution of the process <i>imm8</i>
RESUME								1		<i>imm8</i>	resume the execution of the process <i>imm8</i>
START								1		<i>imm8,imm16</i>	start process number <i>imm8</i> at location <i>imm16</i> (or label) If the process already running it is aborted and context is reinitialised (stack and flag cleared) and program counter assigned to the new location
WRCMD			↕							<i>nr,len,ref,ref</i>	WRITE-READ command (used for complex I/O, init and terminate a SEQ command (wrcmd nr, len: len of param and addr mode of ref) (set ERR on error)
WFLASH		↕								<i>imm</i>	set / clear write flash flag: 0 disable write to flash (default), 1 enable
CLR	0				0	1				<i>var</i>	Clear content of variable
NEG	↕				↕	↕	↕				Two's Complement (value=-value)
NOT	0				↕	↕	1				One's Complement
SHR	↕				↕	↕	↕				Shift right
SHL	↕				↕	↕	↕				Shift left
INC	↕		↕		↕	↕	↕				increment
DEC	↕		↕		↕	↕	↕				decrement
TST	0				↕	↕					Test value for negative or zero
ADD	↕		↕		↕	↕	↕				Addition
SUB	↕		↕		↕	↕	↕				subtraction
CMP	↕		↕		↕	↕	↕				compare
MOV	0				↕	↕					assign
AND	0				↕	↕					logical AND
BIT	0				↕	↕					same as AND but does not modify destination
OR	0				↕	↕					logical OR
XOR	0				↕	↕					logical exclusive OR
DIV						↕	↕				Division attention: DIV push the remainder (byte) on the stack even for direct memory mode
MUL			0				0				Multiply
PUSH					↕	↕					push value/variable in stack
POP					↕	↕					pop from stack to variable