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| Control unit  values | Instruction | Instruction code | Operation  example |
| 1 | NOP | 00000000 | No operation |
| 2 | CLAC | 00000001 | AC←0, Z←1 |
| 3 | LDAC | 00000010 | AC←MDR |
| 4 | STAC | 00000011 | MDR←AC |
| 5 | INAC | 00000100 | AC←AC+1 |
| 6 | DCAC | 00000101 | AC←AC-1 |
| 7 | ADD256 | 00000110 | AC←AC+256 |
| 8 | SUB256 | 00000111 | AC←AC-256 |
| 9 | SUBL | 00001000 | AC<AC-L IF(AC-L)==0, Then Z=1; Else Z=0; |
| 10 | SUBBE | 00001001 | AC←E-AC if(E-AC==0) Then Z=1 Else Z=0 |
| 11 | DIV2 | 00001010 | AC←AC/2 |
| 12 | DIV16 | 00001011 | AC←AC/16 |
| 13 | MUL2 | 00001100 | AC←AC\*2 |
| 14 | MUL4 | 00001101 | AC←AC\*4 |
| 15 | MULL | 00001110 | AC←AC\*L |
| 16 | ADDR1 | 00001111 | AC←AC+R1 |
| 17 | ADDR3 | 00010000 | AC←AC+R3 |
| 18 | ADDL | 00010001 | AC←AC+L |
| 19 | MVACL | 00010010 | L←AC |
| 20 | MVACE | 00010011 | E←AC |
| 22 | MVACR1 | 00010101 | R1←AC |
| 23 | MVACR2 | 00010110 | R2←AC |
| 24 | MVACR3 | 00010111 | R3←AC |
| 25 | MVACR4 | 00011000 | R4←AC |
| 26 | MVACAR | 00011001 | AR←AC |
| 27 | MVEAC | 00011010 | AC←E |
| 28 | MVR1AC | 00011011 | AC←R1 |
| 29 | MVR2AC | 00011100 | AC←R2 |
| 30 | MVR3AC | 00011101 | AC←R3 |
| 31 | MVR4AC | 00011110 | AC←R4 |
| 32 | JMPZ “τ” | 00011111 | If Z=0 then GOTO τ |
| 33 | JMPN“τ” | 00100000 | If Z==0 then GOTO τ |
| 34 | END | 00100001 | End of operation |
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