Overhead	Memory Accesses	Cycles	Notes
Fetch	1	2	
Decode		1	
Branch		1	
Addressing Mode			
Direct Register		2	
Indirect Register	1	3	
Auto-increment	1	4	
Auto-decrement	1	4	
Indexed	2	7	
Indirect Addressing	1	1	
Branch to Single or Double Operand		1	
Write Mode			
Direct Register Write		2	
Indirect Write	1	1	
End		1	

Each Instruction deals with some overhead according to its type, the number of its operands and how it needs to access these operands.

Instruction	Overhead	Memory Accesses	Cycles	Memory Accesses + Invariant Overhead	Cycles + Invariant Overhead	Worst Case Memory Accesses	Worst Case Cycles	Average Memory Accesses	Average Cycles	Notes
`MOV SRC, DST`	Fetch, Decode, Branch, (Source Addressing Mode), (Destination Addressing Mode), Branch to Single or Double Operand, (Write Mode), End	0	2	1	8	8	26	4.875	19	
`ADD SRC, DST`	Fetch, Decode, Branch, (Source Addressing Mode), (Destination Addressing Mode), Branch to Single or Double Operand, (Write Mode), End	0	3	1	9	8	27	4.875	20	
`ADC SRC, DST`	Fetch, Decode, Branch, (Source Addressing Mode), (Destination Addressing Mode), Branch to Single or Double Operand, (Write Mode), End	0	3	1	9	8	27	4.875	20	
`SUB SRC, DST`	Fetch, Decode, Branch, (Source Addressing Mode), (Destination Addressing Mode), Branch to Single or Double Operand, (Write Mode), End	0	3	1	9	8	27	4.875	20	
`SBC SRC, DST`	Fetch, Decode, Branch, (Source Addressing Mode), (Destination Addressing Mode), Branch to Single or Double Operand, (Write Mode), End	0	3	1	9	8	27	4.875	20	
`AND SRC, DST`	Fetch, Decode, Branch, (Source Addressing Mode), (Destination Addressing Mode), Branch to Single or Double Operand, (Write Mode), End	0	3	1	9	8	27	4.875	20	
`OR SRC, DST`	Fetch, Decode, Branch, (Source Addressing Mode), (Destination Addressing Mode), Branch to Single or Double Operand, (Write Mode), End	0	3	1	9	8	27	4.875	20	
`XOR SRC, DST`	Fetch, Decode, Branch, (Source Addressing Mode), (Destination Addressing Mode), Branch to Single or Double Operand, (Write Mode), End	0	3	1	9	8	27	4.875	20	
`CMP SRC, DST`	Fetch, Decode, Branch, (Source Addressing Mode), (Destination Addressing Mode), Branch to Single or Double Operand, (Write Mode), End	0	3	1	9	8	27	4.875	20	
`INC DST`	Fetch, Decode, Branch, (Destination Addressing Mode), Branch to Single or Double Operand, (Write Mode), End	0	2	1	8	5	18	3.375	14.25	
`DEC DST`	Fetch, Decode, Branch, (Destination Addressing Mode), Branch to Single or Double Operand, (Write Mode), End	0	2	1	8	5	18	3.375	15.25	
`CLR DST`	Fetch, Decode, Branch, (Destination Addressing Mode), Branch to Single or Double Operand, (Write Mode), End	0	2	1	8	5	18	3.375	15.25	
`INV DST`	Fetch, Decode, Branch, (Destination Addressing Mode), Branch to Single or Double Operand, (Write Mode), End	0	2	1	8	5	18	3.375	15.25	
`LSR DST`	Fetch, Decode, Branch, (Destination Addressing Mode), Branch to Single or Double Operand, (Write Mode), End	0	2	1	8	5	18	3.375	15.25	
`ROR DST`	Fetch, Decode, Branch, (Destination Addressing Mode), Branch to Single or Double Operand, (Write Mode), End	0	2	1	8	5	18	3.375	15.25	
`ASR DST`	Fetch, Decode, Branch, (Destination Addressing Mode), Branch to Single or Double Operand, (Write Mode), End	0	2	1	8	5	18	3.375	15.25	
`LSL DST`	Fetch, Decode, Branch, (Destination Addressing Mode), Branch to Single or Double Operand, (Write Mode), End	0	2	1	8	5	18	3.375	15.25	
`ROL DST`	Fetch, Decode, Branch, (Destination Addressing Mode), Branch to Single or Double Operand, (Write Mode), End	0	2	1	8	5	18	3.375	15.25	
`BR Offset`	Fetch, Decode, Branch, End	0	6	1	11	1	11	1	11	Add + 3
`BEQ Offset`	Fetch, Decode, Branch, End	0	6	1	11	1	11	1	11	
`BNE Offset`	Fetch, Decode, Branch, End	0	6	1	11	1	11	1	11	
`BLO Offset`	Fetch, Decode, Branch, End	0	6	1	11	1	11	1	11	
`BLS Offset`	Fetch, Decode, Branch, End	0	6	1	11	1	11	1	11	
`BHI Offset`	Fetch, Decode, Branch, End	0	6	1	11	1	11	1	11	
`BHS Offset`	Fetch, Decode, Branch, End	0	6	1	11	1	11	1	11	
`HALT`	Fetch, Decode, Branch	0	1	1	5	1	5	1	5	
`RESET`	Fetch, Decode, Branch, End	0	2	1	7	1	7	1	7	
`NOP`	Fetch, Decode, Branch, End	0	1	1	6	1	6	1	6	
`JSR Address`	Fetch, Decode, Branch, End	2	10	3	15	3	15	3	15	
`INTERRUPT`	Fetch, Decode, Branch, End	2	10	3	15	3	15	3	15	
`RTS`	Fetch, Decode, Branch, End	1	4	2	9	2	9	2	9	
`IRET`	Fetch, Decode, Branch, End	2	8	3	13	3	13	3	13	