

SF = F : Fetch Phase
SF = E : Execute Phase

Arbeitsgruppe Softwareentwicklung und Robotik
Prof. Dr. Sebastian Zug

	0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111
	HLT	JMA	JMP	SRJ	N.A	RAL	INP	OUT	NOT	LDA	STA	ADD	XOR	AND	IOR	NOP
CP1	← MBR ← M[A] →															
CP2																
CP3	← PC ← PC + 1 →															
CP4	← IR ← MBR →															
CP5																
CP6																
CP7	Init RF ← H	if A ₁₅ = 1 PC ← IR ₁₁₋₀	PC ← IR ₁₁₋₀	A ₀₋₁₁ ← PC	Init RF ← H	Z ← A			Z ← A			Z ← A	Z ← A	Z ← A	Z ← A	
CP8	MAR ← PC	MAR ← PC	MAR ← PC	PC ← IR ₁₁₋₀ MAR ← IR ₁₁₋₀	MAR ← PC	SF ← E			SF ← E	← SF ← E MAR ← IR ₁₁₋₀ →						MAR ← PC
CP1										MBR ← M[A]	← MBR ← M[A] →					
CP2						A ← Z*			A ← Z							
CP3																
CP4																
CP5										A ← MBR	MBR ← A					
CP6											M[A] ← MBR					
CP7												* SUM (MBR, Z) A ←	MBR ⊕ Z A ←	MBR · Z A ←	MBR + Z A ←	
CP8						MAR ← PC SF ← F			← MAR ← PC SF ← F →							

* if C₁₅ = 1 then RF ← HLT (Overflow)

Detaillierter Ablauf und Timing der Befehle