

# Sheet1

命令	P1	P2	P3	P4
HLT		HALT		
ADD		・r[Rd]→B, Rr[Rs] → AR	・BR+AR →DR1 set SZVC	
SUB			・BR-AR →DR1 set SZVC	
AND			・BR&AR →DR1 set SZVC	
OR			・BR AR →DR1 set SZVC	
XOR			・BR^AR →DR1 set SZVC	
CMP			・set SZVC	
MOV	(PC)→アドレス・バス ・PC++		・BR →DR1 set SZVC	
SWAP	・データ・バス→IR		・BR→DR1, AR→DR2	
ADDI		・r[Rd]→BR	・BR + I → DR1 set SZCV	
SUBI			・BR - I → DR1 set SZCV	
SLL			・shift_left_rotate(BR, d) → DR1	
SLR			・shift_left_rotate(BR, d) → DR1	
SRL			・shift_right_logical(BR, d) → DR1	
SRA			・shift_right_arithmetic(BR, d) → DR1	
IN				IN → M1
OUT				AR → OUTPUT
LD		r[Ra] → AR, r[Rb] → BR	BR + sign_ext(d) → DR1	DR1 → reg
ST				・DR1 → アドレスバス・AR →
LI			sign_ext(d) → DR1	DR1 → reg
B			PC + sign_ext(d) → DR1	
BE				
BLT				
BLE				
BNE				

P5
DR1 → reg
DR1, DR2 → reg
DR1 → reg
DR → reg
→ データバス
DR1 → PC
if(Z) → DR1 → PC
if(S^Z) → DR1 → PC
if(Z    (S ^ V)) → DR1→PC
if(!Z) → DR1→PC