Example of programs / instruction encodings

Test move register and immediate

			RA	RB	RC	RD
0	mov ra,55	1055	55	00	00	00
2	mov ra,AA	10AA	AA	00	00	00
4	mov rb,22	1122	AA	22		
6	mov rc,33	1233	AA	22	33	
8	mov rd,44	1344	AA	22	33	44
A	mov ra,rd	0003	44	22	33	44
C	mov rc,rb	0201	44	22	22	44
E	mov ra,01	1001	01	22	22	44
10	mov rb,[ra]	0500	01	55	22	44
12	mov rc,[3]	1603	01	55	AA	44
14	mov ra,1e	101e	1E	55	AA	44
16	mov [ra],rc	0802	1E	55	AA	44
18	mov ra,1f	101f	1F	55	AA	44
1A	mov [ra],75	1875	1F	55	AA	44
1C	jmp 0	B000	1F	55	AA	44
1E	data	AA				
1F	data	75				

Test ALU

			RA	RB	RC	RD
0	mov ra,10	1010	10			
2	add ra,2	3002	12			
4	mov rb,3	1103	12	03		
6	add rb,rb	2101	12	06		
8	sub ra,rb	2401	0C	06		
A	mov rc,55	1255	0C	06	55	
C	and rc,aa	3AAA	0C	06	00	
E	mov rc,55	1255	0C	06	55	
10	or rc,aa	3EAA	0C	06	FF	
12	xor rc,0f	520F	0C	06	F0	
14	not rc	6200	0C	06	0F	
16	mov rd,80	1380	0C	06	0F	80
18	asr rd	6F00	0C	06	0F	C0
1a	rol rd	7300	0C	06	0F	81
1C	ror rd	6B00	0C	06	0F	C0
1E	shr rd	6700	0C	06	0F	60

Test compare

```
0     mov  ra,0        1000
2     mov  rb,3        1103
4     add  ra,1        3001
6     cmp  ra,rb       4401
8     jne  4           B904
A     sub  ra,1        3401
C     cmp  ra,FE       54FE
E     je   12          B112
10    jmp  0A          B00A
12    mov  ra,1C       101C
14    jmp  ra          A000
```

Test compare 2

			RA	RB	RC	RD
0	mov ra,0Ah	100A	0A			
2	mov rb,09h	1109	10	09		
4	mov rc,0Ah	120A	10	09	0A	
6	mov rd,0Bb	130B	10	09	0A	0B
8	cmp ra,09h	5409				
A	cmp ra,0Ah	540A				
C	cmp ra,0Bh	540B				
E	cmp ra,r	4401				
10	cmp ra,rc	4402				
12	cmp ra,rd	4403				
14	cmp ra,09	5409				
16	ja 16	B216				
18	jb 18	BB18				
1A	je 1A	B11A				
1C	jmp 14	B014				