

SIMPLE MICROPROCESSOR DESIGN AND SPECIFICATIONS

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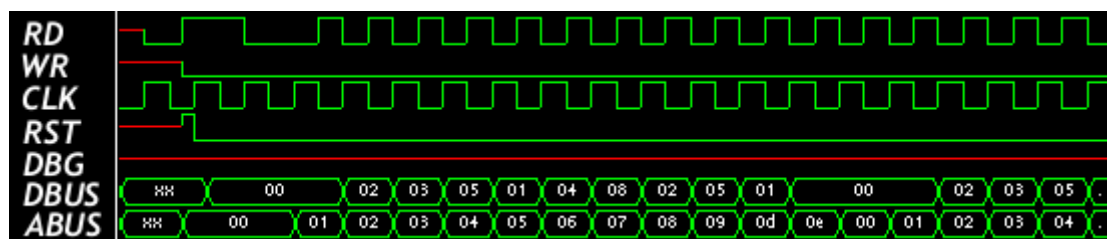
OpCode Table

Hexadecimal	Binary	OpCode
00	00000000	JMP 8bit_address
01	00000001	JMPA
02	00000010	JMPB
03	00000011	MOVA 8bit_data
04	00000100	MOVB 8bit_data
05	00000101	ADDAB
06	00000110	NOP

Simple Assembly Program

Offset	Binary	Hex	Mnemonic
00	00000000 00000010	00 02	JMP 02
02	00000011 00000101	03 05	MOVA
04	00000001	01	JMPA
05	00000100 00001000	04 08	MOVB 08
07	00000010	02	JMPB
08	00000101	05	ADDAB
09	00000001	01	JMPA
0A	00000110	06	NOP
0B	00000110	06	NOP
0C	00000110	06	NOP
0D	00000000 00000000	00 00	JMP 00

Signal Output



Microprocessor specification

<i>Data Bus Length</i>	8 bits
<i>Address Bus Length</i>	8 bits
<i>Address Model</i>	flat
<i>Total Addressable Memory</i>	256 Byte
<i>General Purpose Registers</i>	A, B, IP
<i>Max.Opcode Length</i>	2 Bytes
<i>Supported Instructions</i>	JMP, MOVA, MOVB, ADDAB, JMPA, JMPB, NOP