Micro UAZ 8Bits 2020 v0.02

Instruction   8   [MicroUAZ8-20v0_02]   8   Address_Instruction_Bus

DataIn_Bus   8   8   Address_Data_Bus

- 8 Registers R0-R7
- PC Register
- integer operations

                                            8   DataOut_Bus
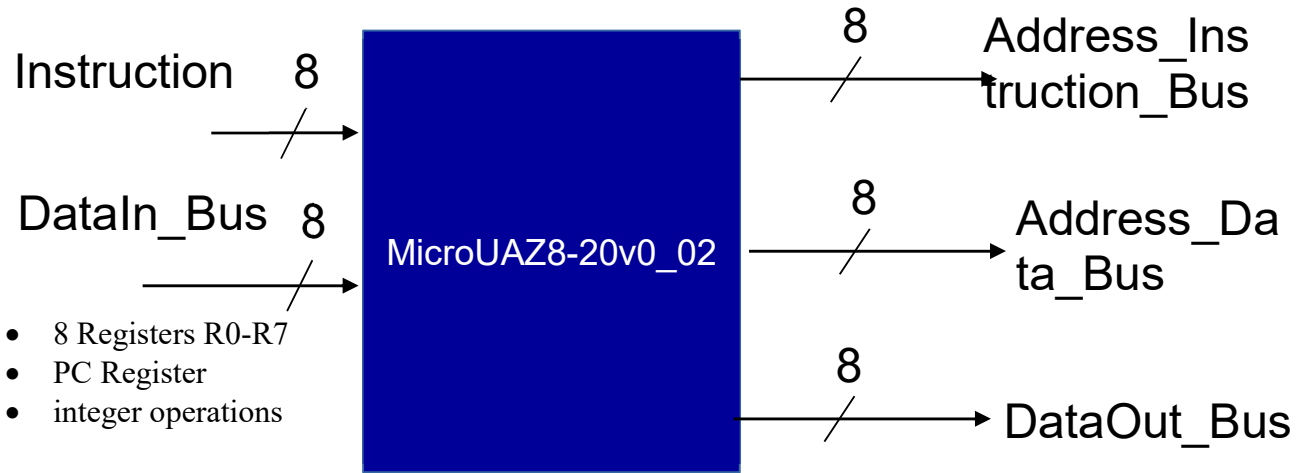
Instruction Set

Instruction	Arguments	Description	Comments
LOAD	RX,#NUM	Load #Num to register X	#Num is 3 bits [0,7]
LOAD	RX,[RY]	Load data at address [RY] from memory	RY and RX are 3 bits[0,7]
STORE	#NUM	Store #Num to [RX] address memory	#Num is 3 bits [0,7]
STORE	[RX],RY	Stores data at Register RY in [RX] memory address	RY and RX are 3 bits [0,7]
MOVE	RX,RY	Move data form register RY to RX	RY and RX are 3 bits [0,7]
MATH	RX,OP	DO MATH OPERATION WITH RX, AND STORES RESULT IN R0	OP: 0: R0=R0+RX 1: R0=R0-RX 2: R0= R0<<RX 3: R0= R0>>RY 4: R0=~RX 5: R0=R0&RX 6: R0 = R0|RX 7: R0=R0^RX
JUMP	[RX],COND	JUMP PC TO [RX] ADDRESS IF COND IS TRUE	COND: 0:NO CONDITION 1: NO CONDITION SAVE PC IN R7 2:Z FLAG IS TRUE 3:Z FLAG IS FALSE 4: C FLAG IS TRUE 5: C FLAG IS FALSE 6: N FLAG IS TRUE 7: N FLAG IS FALSE
NOP		NO OPERATION	