

Figure 2.1
DMX-1000 Architecture

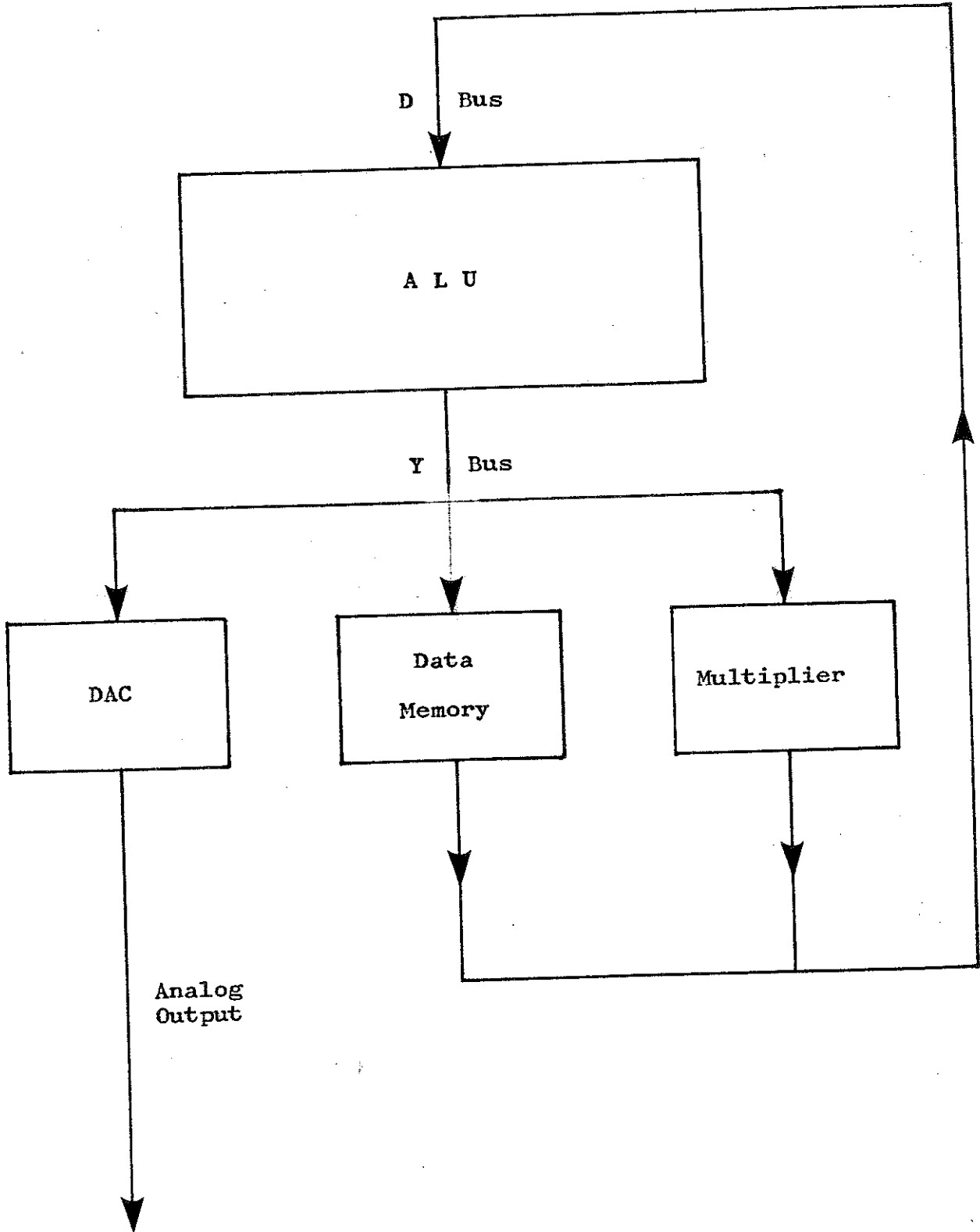


Figure 3.3
Data Memory

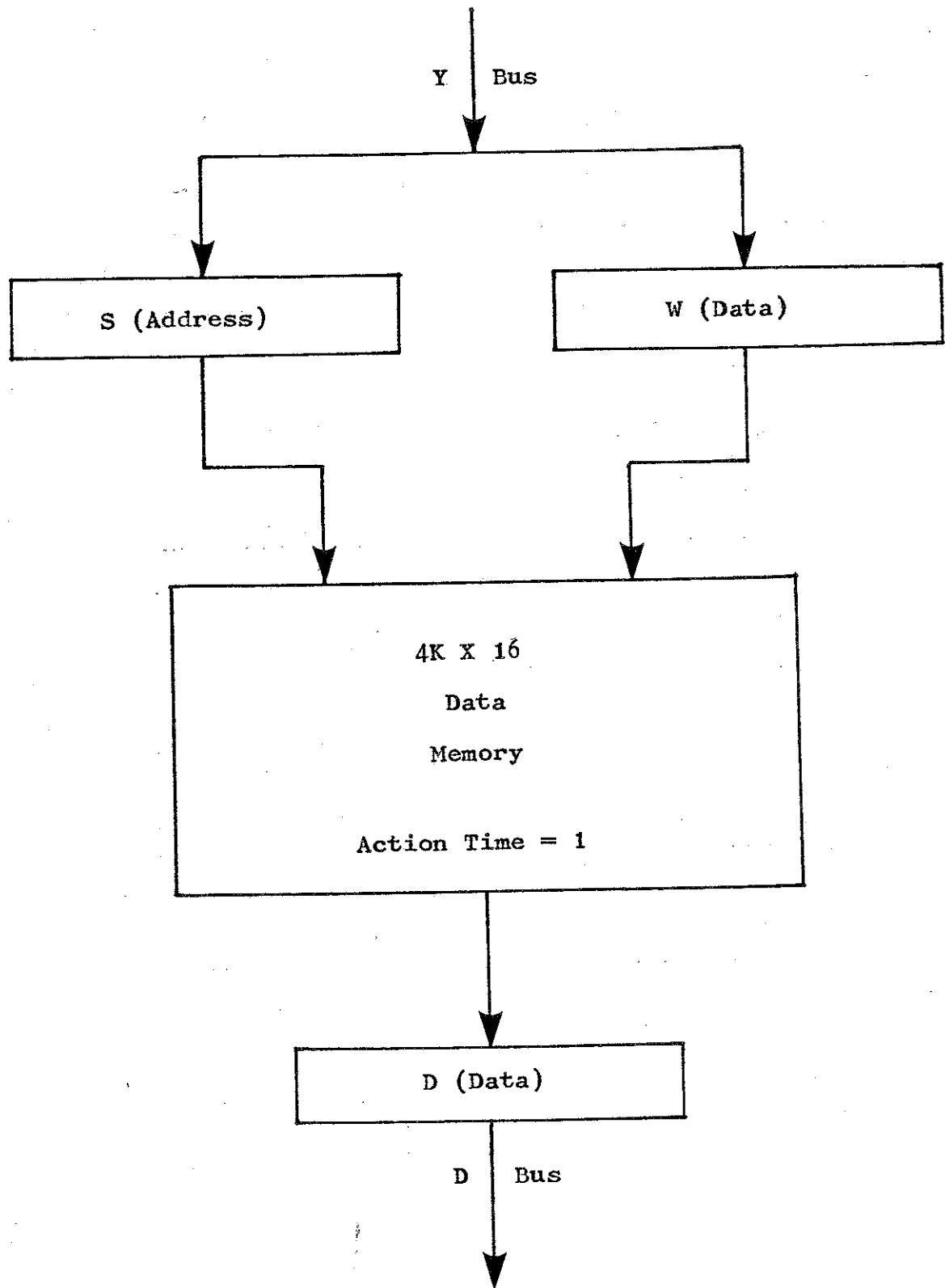


Figure 3.4
Multiplier

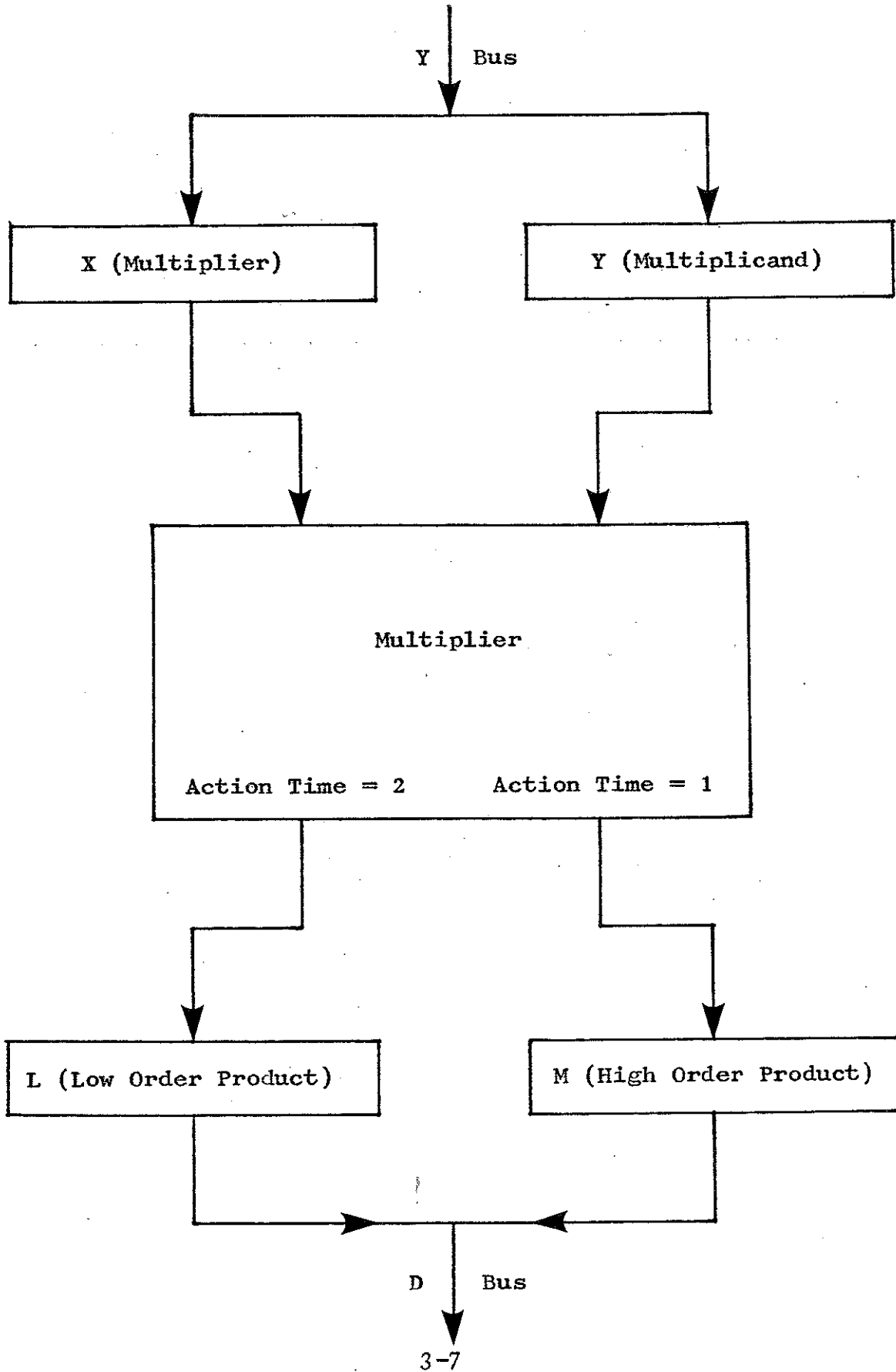


Figure 3.9

DMX-1000 Minimum Configuration

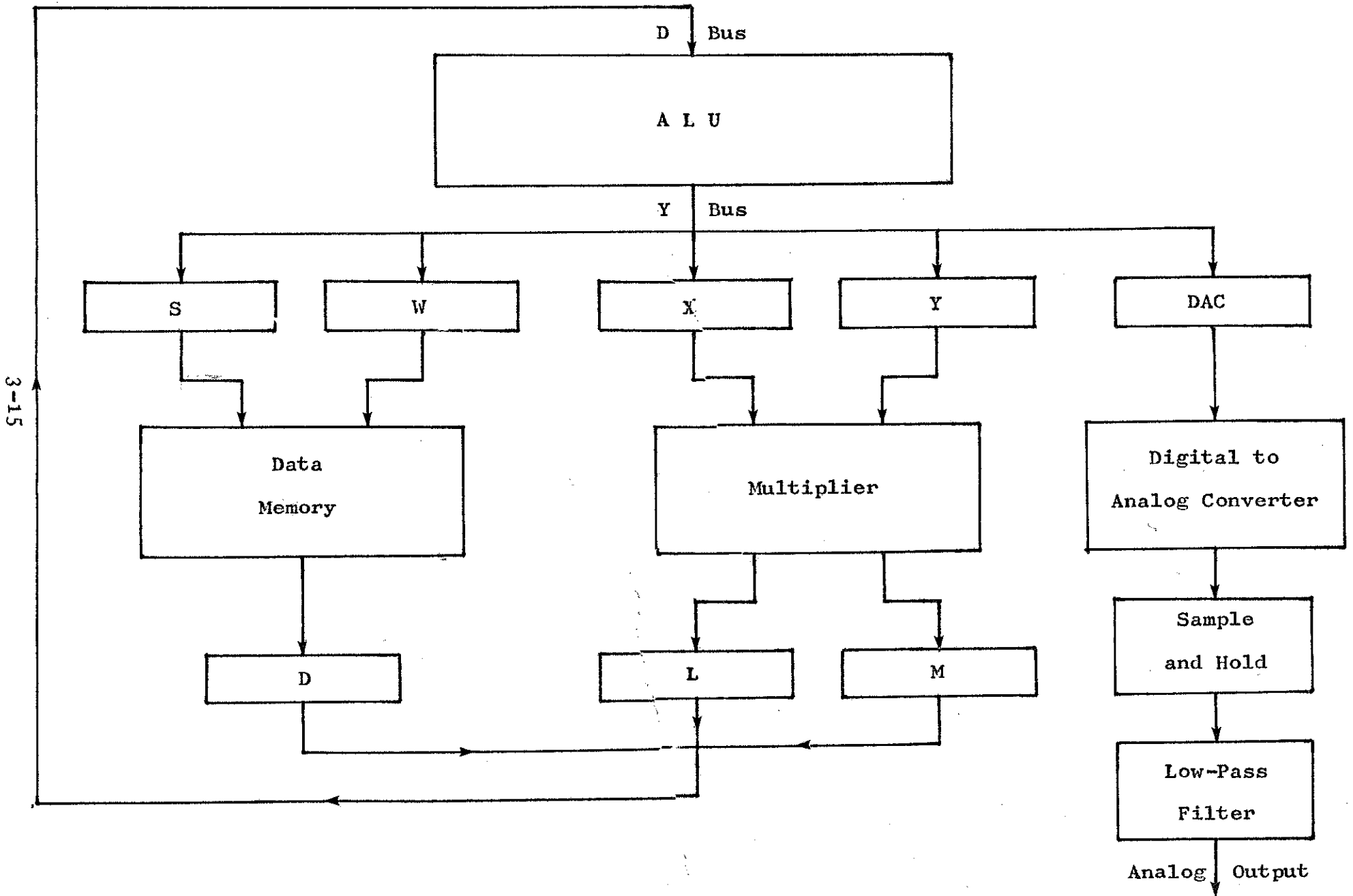
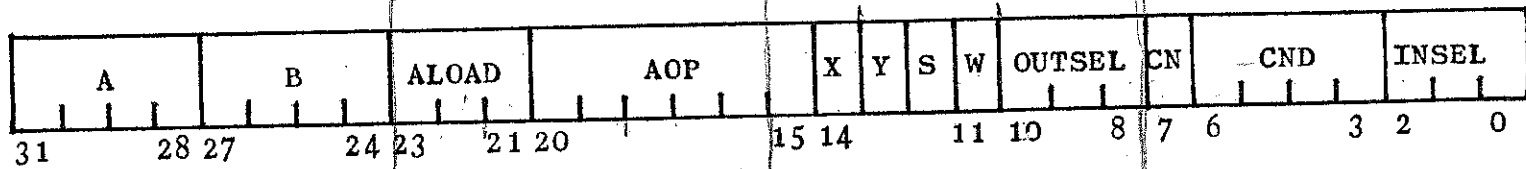


Figure 5.1

DMX-1000 Microcode Instruction Format



5.8.1 ADD

ADD

Type: Double Operand

Operation: Performs two's complement addition of the two operands

Condition Codes: Z set if the result is 0; cleared otherwise

N set if the result is negative; cleared otherwise

V set if bit 14 overflowed into the sign bit, i.e. if arithmetic overflow occurred during the operation; cleared otherwise

C set if the MSB overflowed; clear otherwise

Variations:

<u>Mnemonic</u>	<u>Operation</u>	<u>Microcode Field Values</u>	
		<u>AOP</u>	<u>CN</u>
ADDAQ	A + Q	00	0
ADDAB	A + B	01	0
ADDDA	D + A	05	0
ADDDQ	D + Q	06	0

5.8.9 MOV

MOV

Type: Single Operand

Operation: Move - the result of the instruction is the operand

Condition Codes: Z set if the result is 0; cleared otherwise
 N set if the result is negative; cleared otherwise
 V undefined
 C undefined

Variations:

<u>Mnemonic</u>	<u>Operation</u>	<u>Microcode Field Values</u>	
		<u>AOP</u>	<u>CN</u>
MOVQ	Q	62	0
MOVB	B	63	0
MOVA	A	64	0
MOVD	D	67	0