

Banking Memory Controller

ENABLED

AEXT7
ROM

AEXT6

AEXT5

AEXT4

AEXT3

AEXT2

AEXT1

AEXT0

State

RUN

STOP

FETCH

EXEC

INT

Flags

N

Z

V

I

L

Memory

MEM

I/O

R

W

Instruction Set

μCB3

μCB2

μCB1

μCB0

Interrupt Controller

INT7

INT6

INT5

INT4

INT3

INT2

INT1

INT0

GEN2

GEN1

GEN0

Program Counter

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

0

Accumulator

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

0

Output Register / Data Register / μ-Address Vector

RST

INT

V

L

OP3

OP2

OP1

OP0

I

SKIP

AIDX

μADDR3

μADDR2

μADDR1

μADDR0

Instruction Register

Operand Field

OP3

OP2

OP1

OP0

I

R

9

8

7

6

5

4

3

2

1

0

μ-Instruction

END

INCDR

INCAC

CLI

STI

CLL

CPL

INCPC

OPIF3

OPIF2

OPIF1

OPIF0

WUNIT2

WUNIT1

WUNIT0

RUNIT3

RUNIT2

RUNIT1

RUNIT0



C.F.T minicomputer

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

0

RESET

RUN

μSTEP

LOAD IR

DEPOSIT

EXAMINE

DEPOSIT

EXAMINE

RAM BNK

IFR1

FAST

VERBOSE

OUTPUT REG

START

STOP

STEP

LOAD ADDR

LOAD AC

DEP NEXT

EXAM NEXT

DEP NEXT

EXAM NEXT

ROM BNK

IFR6

SLOW

TEST

TERSE

μADDR VEC

DR