

| <u>Mnemonic</u>                                   | <u>Name</u>                         |
|---|-------------------------------------|
| I. Operations which define data                   |                                     |
| DD  | Data Definition                     |
| SYN   | Synonym                             |
| XW  | Index Word                          |
| CW  | Control Word                        |
| VF  | Value Field                         |
| CF  | Count Field                         |
| RF  | Refill Field                        |
| XM  | Index Multiples                     |
| EXT   | Extract                             |
| DDI   | Data Definition Immediate           |
| DRZ   | Data Reservation which stores zeros |
| INDMK   | Indicator Mask Word                 |
| II. Operations which control printing             |                                     |
| PRNNOR  | Print Normal                        |
| PRNSPC  | Print Special                       |
| PRNS  | Print Single Space                  |
| PRND  | Print Double Space                  |
| SKIP  | Skip                                |
| PRNID   | } Print Identification              |
| PRINID  |                                     |
| SEM   | Suppress Error Mark                 |
| REM   | Restore Error Mark                  |
| SUPCOM  | Suppress Printing of Comment        |
| III. Operations which control punching            |                                     |
| END   | END                                 |
| PUNNOR  | Punch Normal                        |
| PUNFUL  | Punch Full Cards                    |
| NOPUN   | Punch No Cards                      |
| PUNID   | Punch Identification                |
| PUNORG  | Punch Origin Cards                  |
| NOSEQ   | Omit Sequence Punch                 |
| RESEQ   | Reset Sequence Number to One        |
| PUNSYM  | Punch Symbolic Cards                |
| TLB   | Terminate Loading and Branch        |
| IV. Operations which control the location counter |                                     |
| SLC   | Set Location Counter                |
| CNOP  | Conditional No Operation            |
| DR  | Data Reservation                    |
| DRZ   | Data Reservation which stores zeros |

V. Tailing Operations

TAIL Tail  
 UNTAIL Untail

STRAP-1 SYSTEM SYMBOLS

I. Special Registers

| <u>Mnemonic</u> | <u>Name</u>               | <u>Bit Address</u> |
|-----------------|---------------------------|--------------------|
| \$Z             | Word Number Zero          | 0.0                |
| \$IT            | Interval Timer            | 1.0                |
| \$TC            | Time Clock                | 1.28               |
| \$IA            | Interrupt Table Address   | 2.0                |
| \$UB            | Upper Boundary            | 3.0                |
| \$LB            | Lower Boundary            | 3.32               |
| \$BC            | Boundary Control Bit      | 3.57               |
| \$MB            | Maintenance Bits          | 4.0                |
| \$CA            | Channel Address           | 5.12               |
| \$CPU           | Other CPU                 | 6.0                |
| \$LZC           | Left Zeros Counter        | 7.17               |
| \$AOC           | All Ones Counter          | 7.44               |
| \$L             | Left Half of Accumulator  | 8.0                |
| \$R             | Right Half of Accumulator | 9.0                |
| \$SB            | Sign Byte Register        | 10.0               |
| \$IND           | Indicator Register        | 11.0               |
| \$MASK          | Mask Register             | 12.0               |
| \$RM            | Remainder Register        | 13.0               |
| \$FT            | Factor Register           | 14.0               |
| \$TR            | Transit Register          | 15.0               |
| \$0 - \$15      | } Index Registers         | 16.0 - 31.0        |
| \$X0 - \$X15    |                           |                    |

II. Symbols for the Indicators

EQUIPMENT CHECK

|      |                        |      |
|------|------------------------|------|
| \$MK | Machine Check          | 11.0 |
| \$IK | Instruction Check      | 11.1 |
| \$IJ | Instruction Reject     | 11.2 |
| \$EK | Exchange Control Check | 11.3 |

ATTENTION REQUEST

|        |             |      |
|--------|-------------|------|
| \$TS   | Time Signal | 11.4 |
| \$CPUS | CPU Signal  | 11.5 |

INPUT-OUTPUT REJECTS

|        |                       |      |
|--------|-----------------------|------|
| \$EKJ  | Exchange Check Reject | 11.6 |
| \$UNRJ | Unit Not Ready Reject | 11.7 |
| \$CBJ  | Channel Busy Reject   | 11.8 |

INPUT-OUTPUT STATUS

|        |                        |       |
|--------|------------------------|-------|
| \$EPGK | Exchange Program Check | 11.9  |
| \$UK   | Unit Check             | 11.10 |
| \$EE   | End Exception          | 11.11 |
| \$EOP  | End of Operation       | 11.12 |
| \$CS   | Channel Signal         | 11.13 |
|        | (Not available)        | 11.14 |

INSTRUCTION EXCEPTION

|       |                               |       |
|-------|-------------------------------|-------|
| \$OP  | Operation Invalid             | 11.15 |
| \$AD  | Address Invalid               | 11.16 |
| \$USA | Unended Sequence of Addresses | 11.17 |
| \$EXE | Execute Exception             | 11.18 |
| \$DS  | Data Store                    | 11.19 |
| \$DF  | Data Fetch                    | 11.20 |
| \$IF  | Instruction Fetch             | 11.21 |

RESULT EXCEPTION

|      |               |       |
|------|---------------|-------|
| \$LC | Lost Carry    | 11.22 |
| \$PF | Partial Field | 11.23 |
| \$ZD | Zero Divisor  | 11.24 |

RESULT EXCEPTION-FLOATING POINT

|        |  |       |
|--------|--|-------|
| \$IR   | Imaginary Root                                       | 11.25 |
| \$LS   | Lost Significance                                    | 11.26 |
| \$PSH  | Preparatory Shift<br>Greater Than 48                 | 11.27 |
| \$XPFP | Exponent Flag Positive<br>propagated $EXP \geq 1024$ | 11.28 |
| \$XPO  | Exponent Overflow<br>generated $EXP \geq 1024$       | 11.29 |
| \$XPH  | Exponent High<br>$1024 > EXP \geq 512$               | 11.30 |
| \$XPL  | Exponent Low<br>$512 > EXP \geq 64$                  | 11.31 |
| \$XPU  | Exponent Underflow<br>generated $EXP < -1024$        | 11.32 |
| \$XPFN | Exponent Flag Negative<br>propagated $EXP < -1024$   | 11.33 |
| \$RU   | Remainder Underflow                                  | 11.34 |

FLAGGING

|      |            |       |
|------|------------|-------|
| \$TF | T Flag     | 11.35 |
| \$UF | U Flag     | 11.36 |
| \$VF | V Flag     | 11.37 |
| \$XF | Index Flag | 11.38 |

TRANSIT OPERATIONS

|       |                 |       |
|-------|-----------------|-------|
| \$BTR | Binary Transit  | 11.39 |
| \$DTR | Decimal Transit | 11.40 |

III. Symbols for Certain Irrational Numbers

| <u>Mnemonic</u> | <u>Number</u>                                      |  |
|-----------------|--|--|
| \$PI            | $\pi$  |  |
| \$E             | $e$  |  |
| \$M             | $\log_{10} e$                                      |  |
| \$N             | $\log_e 2$   |  |
| \$R             | $\sqrt{x}$ , where $x$ is the field containing \$R |  |

IV. Symbols for STRETCH Input-Output Channels

|        |                |       |
|--------|----------------|-------|
| \$DISC | DISK           | 0.0   |
| \$DISK | DISK           | 0.0   |
| \$TC1  | Tape Channel 1 | 16.0  |
| \$TC2  | Tape Channel 2 | 16.32 |
| \$TC3  | Tape Channel 3 | 17.0  |
| \$TC4  | Tape Channel 4 | 17.32 |
| \$RDR  | Reader         | 18.0  |
| \$PRT  | Printer        | 18.32 |
| \$PCH  | Punch          | 19.0  |
| \$CNSL | Console        | 19.32 |