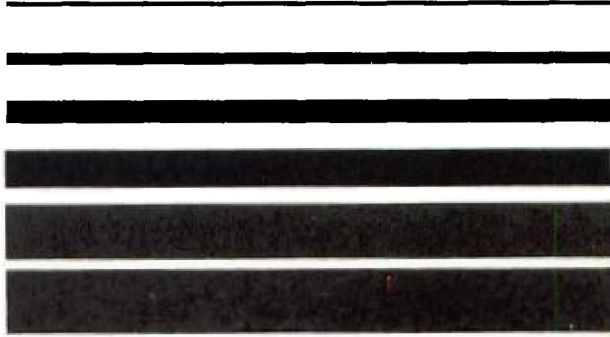




# TXDS Reference Data



Microprocessor  
Series™

**List of Commands and Special Keys/Characters**

**COMMAND SYNTAX**

**DESCRIPTION**

**SETUP COMMANDS**

**SL** Start Line Numbers (SL) command causes line numbers to be printed with each line of text

**SN** Stop Line Numbers (SN) command causes line numbers not to be printed

**SP** Set Print Margin (SP) command sets the right boundary for print display

**SM** Set Margin (SM) for Find command sets the left and right boundaries for the Find command

**ST** Set Tabs (ST) command sets up to five tab stops

**PRINTER-MOVEMENT COMMANDS**

**D** Down (D) command moves the pointer down toward the bottom of the buffer

**U** Up (U) command moves the pointer up towards the first line in the buffer

**T** Top (T) command moves the pointer to the first line in the buffer

**B** Bottom (B) command moves the pointer to the last line in the buffer

**EDIT COMMANDS**

**C** Change (C) command removes lines from the buffer and inserts new ones in their place. The new lines are input from the terminal

**I** Insert (I) command takes input from the terminal and places the new lines into the buffer

**M** Move (M) command moves lines, from one place in the buffer to another

**R** Remove (R) command deletes lines from the buffer

**F** Find string (F) command searches for the first occurrence of a character string in a line and replaces it with another string of characters

**PRINT COMMANDS**

**L** Limits (L) command causes the first line and the last line to be displayed

**P** Print (P) command displays lines of text

**OUTPUT COMMANDS**

**K** Keep (K) command takes lines of text out of the buffer and puts them in the output file

**O** Out (O) command takes lines of text out of the buffer or the input lines and puts them in the output file

**E** An (E) command terminates without writing an EOF to the output file

**TERMINATE-SEQUENCE COMMANDS**

**T or C** Allows the user to make multiple single directional editing passes on a source or object program

**SPECIAL KEYS/CHARACTERS**

**CTRL-H** Pressing the control key and the H key simultaneously on the hard copy terminal causes the terminal to backspace a character to enable rewriting over an entered character-error

**RUB OUT** The RUB OUT key causes the line just entered to be deleted so that a new line can replace it

**CTRL-I** Pressing the control (CTRL) key and the I key simultaneously on a hard-copy terminal causes a tab stop to be entered in the input string, although only one space will be echoed on the terminal

**ESC/RESET** Pressing the ESCape or RESET key on the system console causes a display to be aborted

**position keys** When using a VDT, only the left position key (←) and the right (→) position key are recognized. The up and down position keys cause garbage to be entered into the input string. The left position key causes characters to be deleted from the character string, a right position key causes whatever was under the cursor to be entered

**DELETE LINE** DELETE LINE on a VDT acts the same as a RUB OUT on a hardcopy terminal

**TAB** A SPACE character is echoed. The TAB is interpreted by the text editor and spaces are inserted to fill the text line to the next TAB setting

**TXMIRA Options**

**OPTION**

**DESCRIPTION**

Mnnnnn Overrides memory size default, default is 2400 bytes

X Produce cross-reference

L Produce assembly listing

T Expand TEXT code on listing

S Produce sorted symbol list

C Produce compressed object output where n is a decimal digit

**TXLINK Options**

**OPTION**

**DESCRIPTION**

Mnnnnn Override default memory size, default is 11800 bytes

C Compressed object output

laaaaaaaaa IDT for linked object

P Partial link desired

L Print load map and symbol list

Note: n is a decimal digit and a is an alphanumeric character

**TXCCAT Options**

**OPTION**

**DESCRIPTION**

TRnnnn Truncate record to length nnnn

FLnnnn Fix records to size nnnn by padding with blanks or by truncation

SKnnnn Skip nnnn input records, prior to output

LFnn List file, page length = nn, default = 55

SLnn Space lines on listing, nn = space count, default = 0

Nc Number lines on listing

Rn Do not rewind input on open

RO Do not rewind output on open

Note: n is a decimal digit and the maximum field size is given by the number of n's

**TXDEBUG Keyboard Commands**

**DEBUG Commands**

IC Inspect Communications Register Unit (CRU)

IM Inspect Memory

IR Inspect AU Register (WP, PC, ST)

IS Inspect Snapshot

IW Inspect Workspace Registers

MC Modify Communications Register Unit (CRU)

MM Modify Memory

MR Modify Registers

MW Modify Workspace Registers

SB Set Breakpoint

SP Set H/W Write Protect Option

SR Set Trace Region

SS Set Snapshot

ST Set Trace

CB Clear Breakpoint

CP Clear H/W Write Protect Option

CR Clear Trace Region

CS Clear Snapshot

## INPUT OPTIONS

**string-var** Prompt with colon and input character data  
Example INPUT \$A  
Delimit expressions Example A, B  
Suppress prompting or CR LF if at end of line  
Examples: INPUT ;A  
INPUT A,  
**# exp** Allow a maximum of exp characters to be entered  
Example INPUT #1"Y or N"\$1  
**%exp** \*Must enter exactly exp number of characters  
Example. INPUT %4"CODE"C  
**?<ln>** \*Upon an invalid input or entry of a control character,  
a GOSUB is performed to the line # SYS(0) will be  
equal to -1 if there was an invalid input. Otherwise,  
SYS(0) will equal the decimal equivalent of the control  
character  
Example INPUT ?100 A

## OUTPUT OPTIONS

Delimit exp s or suppress CR LF if at end of line  
Examples ., \, B  
Tab to next print field Example PRINT A, B  
Tab to exp column Example PRINT TAB (50),A  
**string** Print string or string-var Example PRINT "HI",\$(A(0))  
**# exp** \*Print exp as hexadecimal in free format  
Example PRINT # 123  
**#.exp** \*Print exp as hexadecimal in byte format  
Example PRINT # ,50  
**#.exp** \*Print exp as hexadecimal in word format  
Example PRINT # ,A  
**<hex value>** \*Direct output of ASCII codes Example PRINT  
"<OD> <OA>"  
**# string** \*Print under specified format where  
PRINT # "9999"1  
9 = digit holder  
PRINT # "000-00-0000"SS  
0 = digit holder or force 0  
PRINT # "\$\$\$,\$\$\$ 00"DLR  
\$ = digit holder and floats \$  
PRINT # "SSS 0000"4\*ATN1  
S = digit holder and floats sign  
PRINT # "<<< 00>"1  
< = digit holder and float on negative  
>=number  
PRINT # "990 99E"N  
E = sign holder after decimal  
PRINT # "990 99"N  
. = decimal point specifier  
PRINT # "999,990 99"N  
, = suppressed if before significant digit  
PRINT # "999,990^00"1  
^ = translates to decimal point  
PRINT # "HI = 99"1  
any other character is printed

## ERROR CODES

1 - SYNTAX ERROR	37 - ILLEGAL DELIMITER
2 - UNMATCHED PARENTHESIS	38 - UNDEFINED FUNCTION
3 - INVALID LINE NUMBER	39 - UNDIMENSIONED VARIABLE
4 - ILLEGAL VARIABLE NAME	40 - UNDERFINED VARIABLE
5 - TOO MANY VARIABLES	41 = EXPANSION EPROM NOT INSTALLED
6 - ILLEGAL CHARACTER	42 - INTERRUPT W/O TRAP
7 - EXPECTING OPERATOR	43 - INVALID BAUD RATE
8 - ILLEGAL FUNCTION NAME	44 - TAPE READ ERROR
9 - ILLEGAL FUNCTION ARGUMENT	45 = EPROM VERIFY ERROR
10 - STORAGE OVERFLOW	46 - INVALID DEVICE NUMBER
11 - STACK OVERFLOW	
12 - STACK UNDERFLOW	
13 - NO SUCH LINE NUMBER	
14 - EXPECTING STRING VARIABLE	
15 - INVALID SCREEN COMMAND	
16 - EXPECTING DIMENSIONED VARIABLE	
17 - SUBSCRIPT OUT OF RANGE	
18 - TWO FEW SUBSCRIPTS	
19 - TOO MANY SUBSCRIPTS	
20 - EXPECTING SIMPLE VARIABLE	
21 - DIGITS OUT OF RANGE (0 <= # of digits <= 12)	
22 - EXPECTING VARIABLE	
23 - READ OUT OF DATA	
24 - READ TYPE DIFFERS FROM DATA TYPE	
25 - SQUARE ROOT OF NEGATIVE NUMBER	
26 - LOG OF NON-POSITIVE NUMBER	
27 - EXPRESSION TOO COMPLEX	
28 - DIVISION BY ZERO	
29 - FLOATING POINT OVERFLOW	
30 - FIX ERROR	
31 - FOR WITHOUT NEXT	
32 - NEXT WITHOUT FOR	
33 - EXP FUNCTION HAS INVALID ARGUMENT	
34 - UNNORMALIZED NUMBER	
35 - PARAMETER ERROR	
36 - MISSING ASSIGNMENT OPERATOR	