DIRECTORY INFORMATION

File Name (maximum of eight characters)
Starting Disk Address (Decimal)
Length of the File in Blocks (Decimal)
Density (Single or Double)
Type of File (0 to 127 Decimal)
GO Address (If Type 1 in Hex)
R/O if Read Only File
SYSTEM if System File
Attribute Field (0 to 63 Decimal)

baZic ENTRY POINTS AND FLAGS

ADDR	TAG	FUNCTION	DEFAULT
0100	ENTRY1	Clears program	
0104	ENTRY2	Saves program	
0105	ENDBAS	End of **baZic**	
0108	ENDMEM	End memory	
010E	LINECT	Initial line length	80
010F	AUTOS	Auto-start flag	1
0110	PROM	Disk controller origin	E8H
0111	LINETB	Print head table	
0113	PAGES	CRT Lines per page	24
0114	ENTRY3	Saves data	
0117	BSPC	Character delete	8
0118	CONC	Control C inhibit flag	0

Location of Floating Point Board High Order Address Byte:
PRINT EXAM(256+95)+256*EXAM(256+96)+1

COMMON MEMSETS FOR baZic

MEMSET VALUE	HEX EQUIVALENT	MEMORY FROM 0000 HEX
MEMSET 24575	5FFF	24K
MEMSET 28671	6FFF	28K
MEMSET 32767	7FFF	32K
MEMSET 36863	8FFF	36K
MEMSET 40959	9FFF	40K
MEMSET 45055	AFFF	44K
MEMSET 49151	BFFF	48K
MEMSET 53247	CFFF	52K
MEMSET 57343	DFFF	56K
MEMSET 59391	E7FF	58K
MEMSET 61439	EFFF	60K
MEMSET 63487	F7FF	62K
MEMSET 65535	FFFF	64K

OPCODE CHART

Low	High Nybble 8	9	A	B	C	D	E	F
0	LET	FN	CLS	STEP			(	<=
1	FOR	DEF		TO			^	<>
2	PRINT	!		THEN		ATN	*	
3	NEXT	ON		TAB		FILESIZE	+	
4	IF	OUT		ELSE	SQRT	FILEPTR		<
5	READ	FILL		CHR$		ADDR	-	=
6	INPUT	EXIT	DOSCMD	ASC	INT	INSTAT		>
7	DATA	OPEN	APPEND	VAL		OUTSTAT	/	NOT
8	GOTO	CLOSE		STR$		FREE		
9	GOSUB	WRITE		NOENDMARK		INP	NOTE2	
A	RETURN	NOTE1		INCHAR$	SGN	EXAM		
B	DIM	CHAIN		FILE	SIN	ABS		
C	STOP	LINE			LEN	COS	AND	
D	END	DESTROY			CALL	LOG	OR	
E	RESTORE	CREATE			RND	EXP		
F	REM	ERRSET				TYP	>=	

NOTE1--9A indicates the next two bytes are a binary line number.
NOTE2--E9 is used internally as negate

DOSCMD available in MicroDoz version only.
INSTAT and OUTSTAT available in MicroDoz and CP/M versions only.

DOS FILE TYPES:

0 Default type
1 Machine Language Program
2 **baZic** program
3 **baZic** data file

FILE DATA TYPES:

0 Endmark
1 String
2 Number

ASCII TABLE

ASCII	DECIMAL	HEX	OCTAL	ASCII	DECIMAL	HEX	OCTAL
NUL	0	00	000	SP	32	20	040
SOH	1	01	001	!	33	21	041
STX	2	02	002	"	34	22	042
ETX	3	03	003	#	35	23	043
EOT	4	04	004	$	36	24	044
ENQ	5	05	005	%	37	25	045
ACK	6	06	006	&	38	26	046
BEL	7	07	007	'	39	27	047
BS	8	08	010	(	40	28	050
HT	9	09	011	)	41	29	051
LF	10	0A	012	*	42	2A	052
VT	11	0B	013	+	43	2B	053
FF	12	0C	014	,	44	2C	054
CR	13	0D	015	-	45	2D	055
SO	14	0E	016	.	46	2E	056
SI	15	0F	017	/	47	2F	057
DLE	16	10	020	0	48	30	060
DC1	17	11	021	1	49	31	061
DC2	18	12	022	2	50	32	062
DC3	19	13	023	3	51	33	063
DC4	20	14	024	4	52	34	064
NAK	21	15	025	5	53	35	065
SYN	22	16	026	6	54	36	066
ETB	23	17	027	7	55	37	067
CAN	24	18	030	8	56	38	070
EM	25	19	031	9	57	39	071
SUB	26	1A	032	:	58	3A	072
ESC	27	1B	033	;	59	3B	073
FS	28	1C	034	<	60	3C	074
GS	29	1D	035	=	61	3D	075
RS	30	1E	036	>	62	3E	076
US	31	1F	037	?	63	3F	077
@	64	40	100	`	96	60	140
A	65	41	101	a	97	61	141
B	66	42	102	b	98	62	142
C	67	43	103	c	99	63	143
D	68	44	104	d	100	64	144
E	69	45	105	e	101	65	145
F	70	46	106	f	102	66	146
G	71	47	107	g	103	67	147
H	72	48	110	h	104	68	150
I	73	49	111	i	105	69	151
J	74	4A	112	j	106	6A	152
K	75	4B	113	k	107	6B	153
L	76	4C	114	l	108	6C	154
M	77	4D	115	m	109	6D	155
N	78	4E	116	n	110	6E	156
O	79	4F	117	o	111	6F	157
P	80	50	120	p	112	70	160
Q	81	51	121	q	113	71	161
R	82	52	122	r	114	72	162
S	83	53	123	s	115	73	163
T	84	54	124	t	116	74	164
U	85	55	125	u	117	75	165
V	86	56	126	v	118	76	166
W	87	57	127	w	119	77	167
X	88	58	130	x	120	78	170
Y	89	59	131	y	121	79	171
Z	90	5A	132	z	122	7A	172
[	91	5B	133	{	123	7B	173
\	92	5C	134	|	124	7C	174
]	93	5D	135	}	125	7D	175
^	94	5E	135	~	126	7E	176
_	95	5F	137	DEL	127	7F	177

baZic®

A Z80-CODE HIGH LEVEL INTERPRETIVE BASIC

POCKET REFERENCE CARD

Mike's

DEVELOPED BY:

MICRO MIKE'S, INC.
905 S. Buchanan
Amarillo, TX 79101 *USA*

making technology uncomplicated . . . for **People**

MNEMONICS:

LINE#	**baZic** line number
DEVICE#	Number of an input or output device
DRIVE#	Number of a disk drive
FILENAME	The name of a file
#EXPR	A numeric expression
LOGEXPR	A logical expression
TYPEXPR	A type expression
CHANNEL#	A disk channel number
[]	Enclosed is optional

DIRECT COMMANDS:

AUTO [<LINE#>] [,<INCREMENTAL VALUE>]
BYE
CAT [#<DEVICE#>] [,<DRIVE#>]
CONT
DEL <LINE#>,<LINE#>
LIST [#<DEVICE#>] [,<LINE#>] [,<LINE#>]
LOAD <FILENAME>
MEMSET <MEMORY ADDRESS>
NSAVE <FILENAME> [<FILESIZE>]
PSIZE
REN [<LINE#>] [,<INCREMENTAL VALUE>]
RUN [<LINE#>]
SAVE <FILENAME>
SCR

STATEMENTS:

* can be used as a command in direct mode

Program Data Statements:

DATA <LIST OF CONSTANTS>
READ <LIST OF VARIABLES>
***RESTORE** [<LINE#>]

Input and Output Statements:

INPUT [<DEVICE#>] [,<STRING PROMPT>,] <VARIABLE LIST>
INPUT! [<DEVICE#>] [,<STRING PROMPT>,] <VARIABLE LIST>
***OUT** <PORT NUMBER>,<BYTE VALUE>
***PRINT[@**(ROW,COLUMN)] [#<DEVICE#>] [,<LIST OF EXPRESSIONS>]
***![@**(ROW,COLUMN)] [#<DEVICE#>] [,<LIST OF EXPRESSIONS>]

Branching Statements:

FOR <CONTROL>=<INITIAL> **TO** <LIMIT> [**STEP** <VALUE>]
GOSUB <LINE#>
GOTO <LINE#>
***IF** <LOGEXPR> **THEN** <STATEMENT> [**ELSE** <STATEMENT>]
ON <#EXPR> **GOSUB** <LIST OF LINE NUMBERS>
ON <#EXPR> **GOTO** <LIST OF LINE NUMBERS>
RETURN

File Statements:

***APPEND** [<LINE#>,]<FILENAME>
***CHAIN** <FILENAME>
***CLOSE** #<CHANNEL#>
***CREATE** <FILENAME>,<FILESIZE>[,<FILETYPE>]
***DESTROY** <FILENAME>
***DOSCMD** <ANY MICRODOZ COMMAND>
***OPEN** #<CHANNEL#>[%<TYPEXPR>],<FILENAME>[,<SIZEVAR>]
***READ#** #<CHANNEL#>[%<RANDOM ADDRESS>],<LIST OF VARIABLES>
***WRITE#** #<CHANNEL#>[%<RANDOM ADDRESS>],<LIST OF EXPRESSIONS>

Miscellaneous Statements:

***CLS** [#<DEVICE#>]
***DIM** <VARIABLE NAME> (<ARRAY OR STRING SIZE >)
END
ERRSET [<LINE#>,<ERROR LINE NUMBER>,<ERROR NUMBER>]
***FILL** <LOCATION>,<BYTE VALUE>
***[LET]** <NUMERIC VARIABLE>=<NUMERIC EXPRESSION>
***[LET]** <STRING VARIABLE>=<STRING EXPRESSION>
***LINE** [#<DEVICE#>,]<#EXPR>[,<#EXPR>]
REM <ANY LINE OF TEXT>
STOP

BUILT-IN FUNCTIONS:

Math Functions:

ABSolute value (<EXPRESSION>)
ArcTaNgent (<NUMERIC EXPRESSION>)
COSine (<NUMERIC EXPRESSION>)
EXPonential value (<NUMERIC EXPRESSION>)
INTeger value (<NUMERIC EXPRESSION>)
LOGarithmic value (<NUMERIC EXPRESSION>)
SiGN of a number (<NUMERIC EXPRESSION>)
SINe (<NUMERIC EXPRESSION>)
SQuare **RooT** (<NUMERIC EXPRESSION>)

String Functions:

ASCii value (<STRING EXPRESSION>)
CHRaracter$ (<NUMERIC EXPRESSION>)
LENgth of a string (<STRING NAME>)
STRing$ (<NUMERIC EXPRESSION>)
VALue (<STRING EXPRESSION>)

Input Functions:

INput a **CHA**racter$ (<DEVICE#>)
INPut a byte (<PORT NUMBER>)
INput the **STA**Tus (<DEVICE#>)
OUTSTATus (<DEVICE#>)

File Functions:

FILE type (<FILENAME>)
FILEPoinTeR position (<CHANNEL#>)
FILESIZE (<CHANNEL#>)
TYPe of file pointer (<CHANNEL#>)

Miscellaneous Functions:

ADDRess of a variable (<VARIABLE NAME>)
CALL machine language (<MEMORY ADDRESS> [,<DE ARGUMENT>])
EXAMine memory (<MEMORY LOCATION>)
FREE memory (<DUMMY ARGUMENT>)
TABulate (<#EXPR>)
RaNDom (<#EXPR>)

USER-DEFINED FUNCTIONS:

DEF <FUNCTION NAME> (<PARAMETER LIST>) [=<EXPRESSION>]
RETURN <NUMERIC OR STRING VARIABLE>
FNEND

OPERATORS

Arithmetic Operators:

OPERATOR	FUNCTION	EXAMPLE
^	EXPONENTIATION	64=8^2
*	MULTIPLICATION	50=5*10
/	DIVISION	10=50/5
-	SUBTRACTION	12=25-13
+	ADDITION	15=5+10
-	NEGATION	-5=-(+5)

Relational Operators:

OPERATOR	RELATION	EXAMPLES TRUE (1)	FALSE (0)
=	EQUAL	1=1	1=2
<	LESS THAN	1<2	1<1
>	GREATER THAN	2>1	2>2
<=	LESS THAN OR EQUAL	2<=2	2<=1
>=	GREATER THAN OR EQUAL	2>=1	2>=3
<>	NOT EQUAL	2<>1	2<>2

Boolean Operators:

AND, OR, and NOT.

Order of Evaluation

NOT, -	(logical operator,negate a number)
^	(exponentiation)
*,/	(multiplication and division)
+,-	(addition and subtraction)
=,<,>,<=,>=,<>	(relational operators)
AND	(logical operator)
OR	(logical operator)

FORMATTED PRINTING:

F format (nFm)
I format (nI)
E format (nEm)
PRINT [<%FORMAT CHARACTERS FORMAT SPECIFICATION>],<VARIABLES>

FORMAT CHARACTERS:

A	Accounting
C	Comma
Z	Suppress Zeros
+	Positive number
$	Dollar sign
#	Default format

TRAPPABLE ERRORS:

ARGument (Error 1)
DIMENSION (Error 2)
OUT OF BOUNDS (Error 3)
TYPE (Error 4)
FORMAT (Error 5)
LINE NUMBER (Error 6)
FILE (Error 7)
HARD DISK (Error 8)
DIVIDE by **ZERO** (Error 9)
SYNTAX (Error)
READ (Error 11)
INPUT (Error 12)
ARGument **MISMATCH** (Error 13)
NUMERIC OVerflow (Error 14)
STOP/control C (Error 15)
LENGTH (Error 16)

LINE EDITOR

Control G Copy to end of line.
Control N Cancel to edit again.
Control A Copy one character.
Control Q Back up one character.
Control Z Erase one character.
Control D Copy to character.
Control Y Toggle insert.