

ABASIC ASSEMBLY SUPPORT AND OTHER INFORMATION--CON'T

ABASIC Memory block >F000->FFFF

>F000->F01F	User and ABASIC WS Register
>F020->F03F	ABASIC WS Register
>F040->F047	Fast move byte routine
>F048->F04F	Fast move word routine
>F050->F061	Fast move to/from stack routine
>F062->F07D	Fast move memory table page 3 to active page 3
>F080->F0FF	ABASIC WS Registers (Many Abasic routines use these registers i.e.XOP)
>F100->F107	Port read/write (0,1,2,3)
>F108->F10F	Port read/write (0,1,2,3)
>F110->F117	Page Map(active pages)
>F120->F12F	Sound
>F130->F13F	Clock
>F140->FE2F	Abasic support data(i.e. i/o pab, buffers, program storage info) Corruption of this memory block will cause lockup.
>FE30->FF2F	Reserved for ABASIC
>FF30->FFDF	Unused block of memory(Debug may use part of this)
>FFE0->FFFF	Used by MDOS and DEBUG

Call Peek can be used to get the values from >0000->FFFF memory addresses. Information at these memory addresses are values based on the visible memory(active pages).

Call Load can be used to put values in >2000->DFFF memory addresses, but memory addresses >2000->24F3 contain the Abasic Assembly support routines and other Abasic routines. (See Utilities info table)

The following are the syntax for STCR and LDCR:

CALL STCR(address,length,input value)
CALL LDCR(address,length,output value)

The following are four new assembly instructions available to the TMS9995:

DIVS (DIVide Signed) MPYS (MultiPIY Signed)

[<label>] DIVS <gas> [<comment>]
[<label>] MPYS <gas> [<comment>]

A destination-operand is not used, because it must always be R0 and R1 of the user workspace.

Examples

DIVS R2	DIVS *R4+	DIVS @ADDR	DIVS @VALUE(R10)
MPYS R3	MPYS *R7+	MPYS @LABEL	MPYS @INDEX(R8)

opcodes:	DIVS	=	>0180	Format VI
	MPYS	=	>01C0	Format VI

LWP (Load Workspace-Pointer from a register)
LST (Load SStatus-register)

[<label>] LWP <wa> [<comment>]
[<label>] LST <wa> [<comment>]

opcodes:	LWP	=	>0090	Format VIII
	LST	=	>0080	Format VIII
Examples	LWP R5	LWP R12	LST R13	LST R0