Format CALL EXECUTE(cpu-address[,...])

CALL EXECUTE(numeric-variable[,...])

Description

The EXECUTE subprogram directly goes to the cpu-address and expects to find 4 bytes to be present. The bytes are 1 and 2 define the workspace register address. Bytes 3 and 4 define the address to start execution at in cpu memory. Programmers can see this is a BLWP at a cpu-address. The programmer is responsible for keeping track of the workspace and program space he is using. Also for any registers while doing a BL or another context switch. A RTWP will end either a BL or a BLWP as long as registers set are not changed. By using CALL LOAD or CALL MOVES the programmer can set up a BLWP routine in the lower 8K by filling the registers with values first, then using CALL EXECUTE to directly complete these commands. This is faster then CALL LINK as no interpretation of the access or values are checked.

EXECUTE runs a XML link from GPL by moving 12 bytes from the Fast RAM at HEX 8300 to VDP at HEX 03C0 then moving the value in FAC passed from XB to HEX 8304 and does a GPL XML >F0 After a RTWP by the Assembly program, it returns VDP HEX 03C0 to Fast RAM HEX 8300 so the 12 bytes are restored. Thus this allows programmers use of FAC and ARG areas in Fast RAM. Here is the program loaded into Fast RAM by EXECUTE:

	AORG	>8300	
CPUPGM	DATA	>8302	First address.
	BLWP	@>834A	Switch context
			with FAC as dummy.
	CLR	@>837C	Clear for GPL return.
	RT		Return to GPL.
	END		

If a programmer absolutely must use Fast RAM for his program I suggest he set up a buffer for saving HEX 8300 to HEX 83FF if only so it will not mess up any GPL pointers and don't go and mess up the 12 bytes at VDP HEX >03C0. Then the only thing to worry about is messing up something else.