VR MODULE SOURCE CODE

The VR module source code is sent to the VR modules from the JA module via the AM. It controls the Scalar and Vector registers. The code is sent out in CP1 and CP2 of the instruction.

CP2 on AM CP3 on AM

VR Module Source Code

	CP1 of Instr.	CP2 of Instr.
OHA	$2^0 - 2^2$	$2^0 - 2^2$ of
OHB	of	I or K Desig.
OHC	J Desig.	(See note #3)
OHD	VR Module	$2^0 - 2^2$ of I Desig.
OHE	Function Code	or Scalar Code
OHF	(See note #1)	(See note #4)
OHG	Go Vect. Write (See note #2)	0

Use I if note 3 is true
Use K_{code} if note 4 is true
otherwise K, I,

Note #1: VR Module Function Code

0 - No Function
1 - Vector Integer Unit (Instr. 150-3, 160-5, 176, 7)
2 - Local Memory (Instr. 45-7, 55-7, 74, 5)
3 - Common Memory (Instr. 60-73)
4 - Floating Add (Instr. 120-3, 170-5)
5 - Floating Multiply (Instr. 124-7, 132, 3, 154-7, 166, 7)
6 - Vector Logical (Instr. 30-4, 114, 5, 140-7)
7 - Scalar Logical (Instr. 100-3)

Note #2: Go Vector Write

This bit is set for the following instructions: 70, 2, 4, 140-174

Note #3: The I designator is used for instructions - 57, 61, 3, 5, 7, 71, 3, 5, 110-3 (Si to Local Memory or Common Memory, Si to Scalar Shifter, or Vi to Local Memory or Common Memory)
The K designator is used for the instructions - 30-4, 100-3, 120-7, 140-77 (Sk or Vk to Functional Units, or Vk to Mask Register)

Note #4: The I designator is used for instruction 70, 2, 4, 140-175 (Common Memory to Vi or Functional Unit Result to Vi)
The Scalar code is used for instructions 100-103.

Scalar Code: 0 - N/U
1 - 100 instr.
2 - 101 instr.
3 - N/U
4 - N/U
5 - N/U
6 - 102 instr.
7 - 103 instr.