Timing For Scalar and Vector Data To Functional Units

Final clock period on VR module is:

 $\begin{array}{ccc} \underline{\text{CP5}} & \underline{\text{CP6}} & \underline{\text{CP7}} \\ \underline{\text{Sj}} & \underline{\text{Sk}} & \underline{\text{Vj}} \end{array}$

Si (Data to L.M. or C.M.) Si (Int. Shift) Vi (Data to L.M. or C.M.)

Si, Sj, Sk and Vk all share the same paths off the VR modules and have to leave in different clock periods. Vj has a separate path off the VR's and leaves in the same clock period as Vk for instructions that require two Vector operands. The data is latched up on the active unit that clock after it leaves the VR's.