

GB MODULE GENERAL DESCRIPTION

The GB module contains the Scalar Integer Shift functional unit. Right and left shifts are performed on single 64 bit operands, or double, 128 bit operands. All shifts are end off and zero fill.

The GB module receives scalar data from the eight VR modules. The GB latches Sj data, for double shifts, clock period six of the instruction. Si data is latched in clock period seven. The result of the shift is returned to the VR's and stored in Si.

The hardware on the GB module only performs right shifts. For a left shift, a right shift is performed using the two's complement of the shift count.

Scalar Integer Shift Functional Unit Summary

Functions: Scalar left shift
 Scalar right shift

Module : GB

Instruction Summary

110ijk Enter Si with Si shifted left 64 - jk
111ijk Enter Si with Si shifted right jk

112ijk Enter Si with Si, Sj shifted left Ak
113ijk Enter Si with Sj, Si shifted right Ak