SIMD CORRECTION CIRCUIT FOR ARITHMETIC/SHIFT OPERATIONS

ABSTRACT

A microprocessor circuit (10) is disclosed for instructions on an arithmetic/shift function performing standard operations (e.g., ALU instructions or Shift instructions) on instructions in a first cycle of operation, and a correction circuit (20) responsive to the arithmetic/shift function for modifying the standard results provided by the arithmetic/shift function to results required by a SIMD instruction being executed. The arithmetic/shift function is an instruction provided by either an Arithmetic Logic Unit (ALU) or by a shift instruction. The correction circuit (20) passes data, unchanged for logical instructions but provides condition codes according to the SIMD instruction.

Fig. 1