

FIGURE B.5.11 A 32-bit ALU constructed from the 31 copies of the 1-bit ALU in the top of Figure B.5.10 and one 1-bit ALU in the bottom of that figure. The Less inputs are connected to 0 except for the least signì cant bit, which is connected to the Set output of the most signì cant bit. If the ALU performs a – b and we select the input 3 in the multiplexor in Figure B.5.10, then Result = 0 ... 001 if a < b, and Result = 0 ... 000 otherwise.