```
   PUSH(barrier_address);
   t = parallel_expr;
   gather_result = WAIT_GATHER(barrier_address, t);
   if (t == 0) goto Else;
   barrier_address &= gather_result;
 stat_a;
   barrier_address = POP(); A: WAIT(barrier_address); /* pairs
with B */
   goto Exit; Else: B: WAIT(barrier_address); /* pairs with A */
   barrier_address &= ( flag_vector_mask ^ gather_result);
 stat_b;
   barrier_address = POP(); Exit:
   WAIT(barrier_address); /* all processors here */
```

Listing 5: Structured SIMD parallel `if-else`