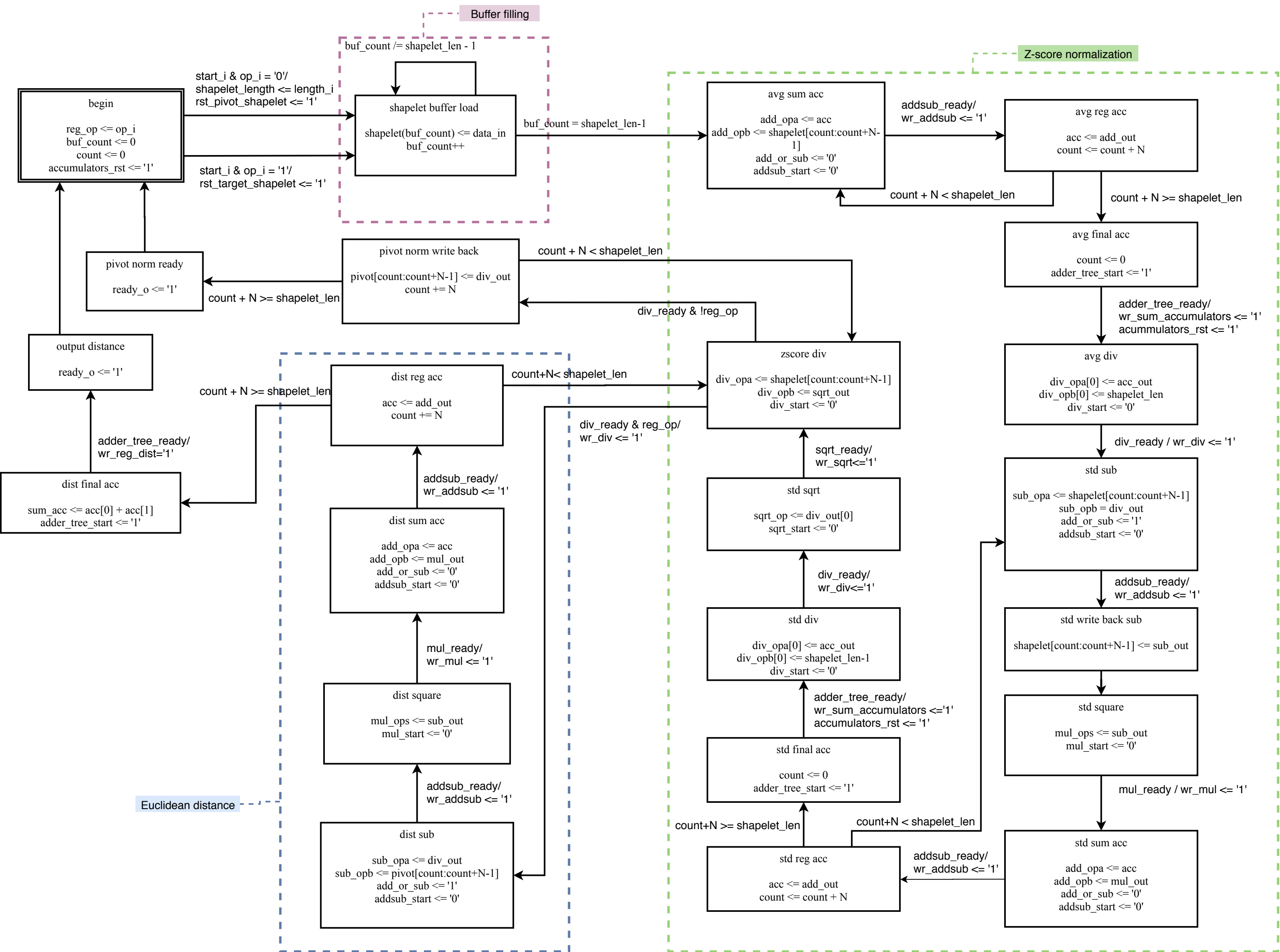


# SHAPELET DISTANCE ACCELERATOR FSM



$N$  is the number of processing units used (NUM\_PU in the entity).

When not explicited, operands are assumed to have full length (e.g.  $\text{add\_opa} = \text{add\_opa}[0:N-1]$ ).

$op_i$  indicates the operations performed by the accelerator:

0: Change length and normalize a new pivot shapelet

1: Calculate distance between normalized pivot shapelet and a new target shapelet

For operation 0, consider the signal shapelet in this FSM to mean pivot buffer and for operation 1, consider the signal shapelet in this FSM to mean target buffer