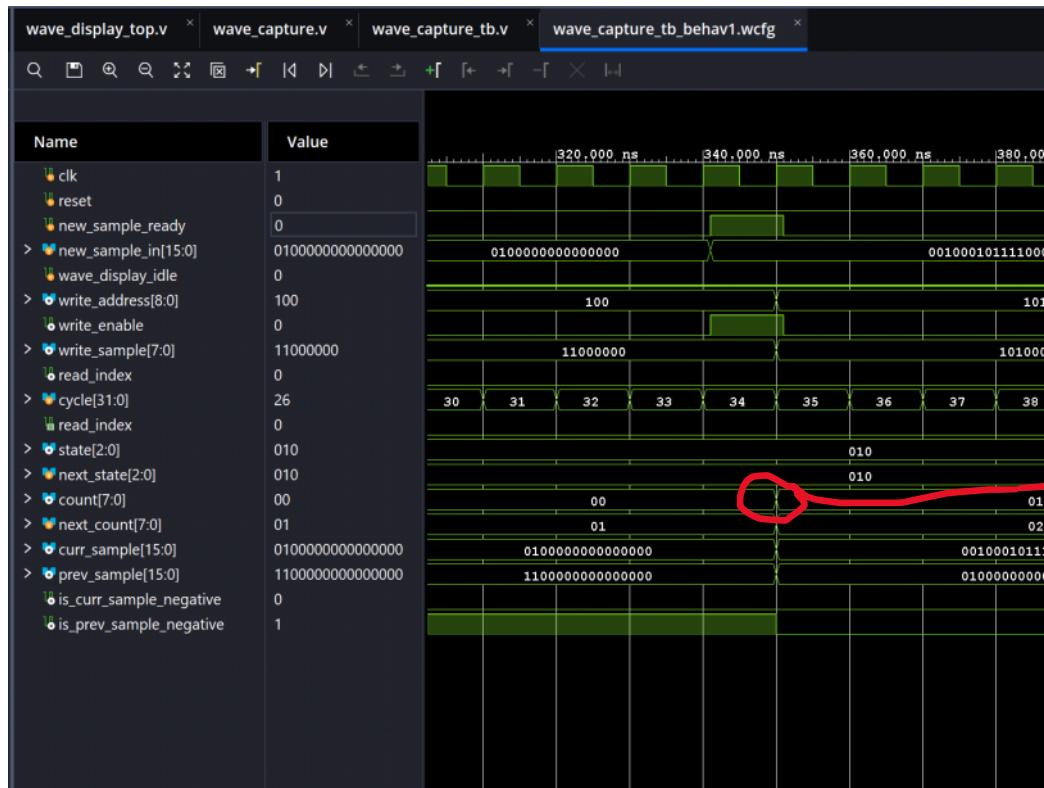
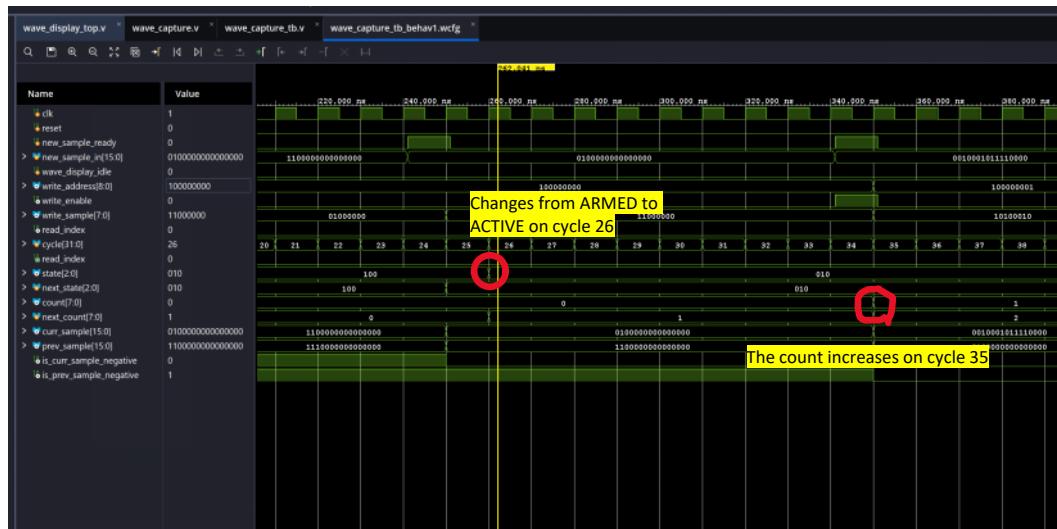
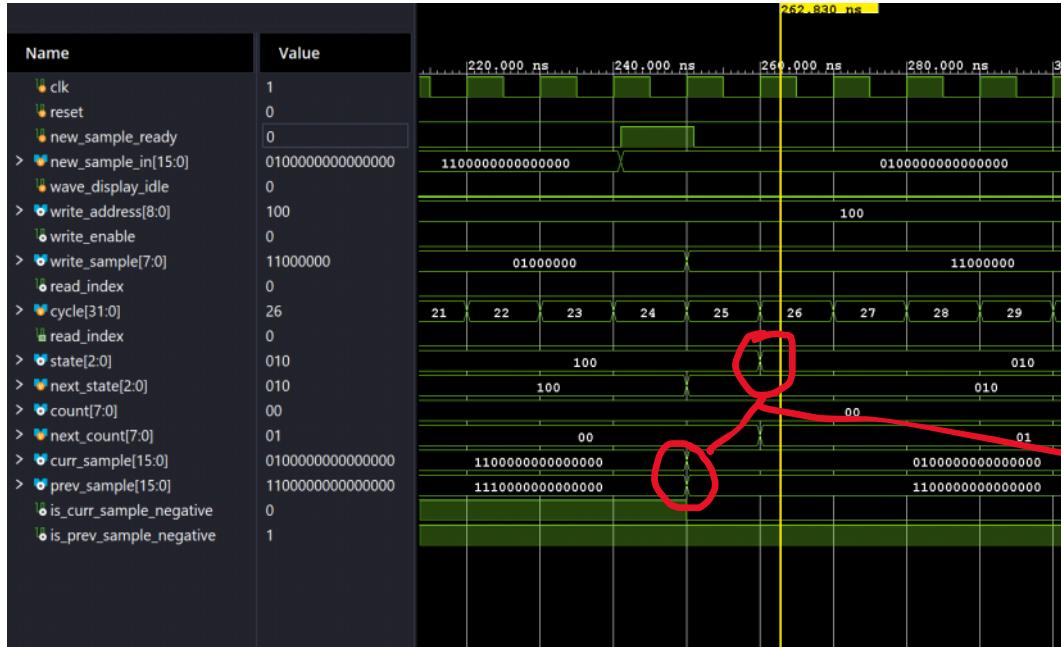


# Wave\_capture annotated waveform/test\_bench

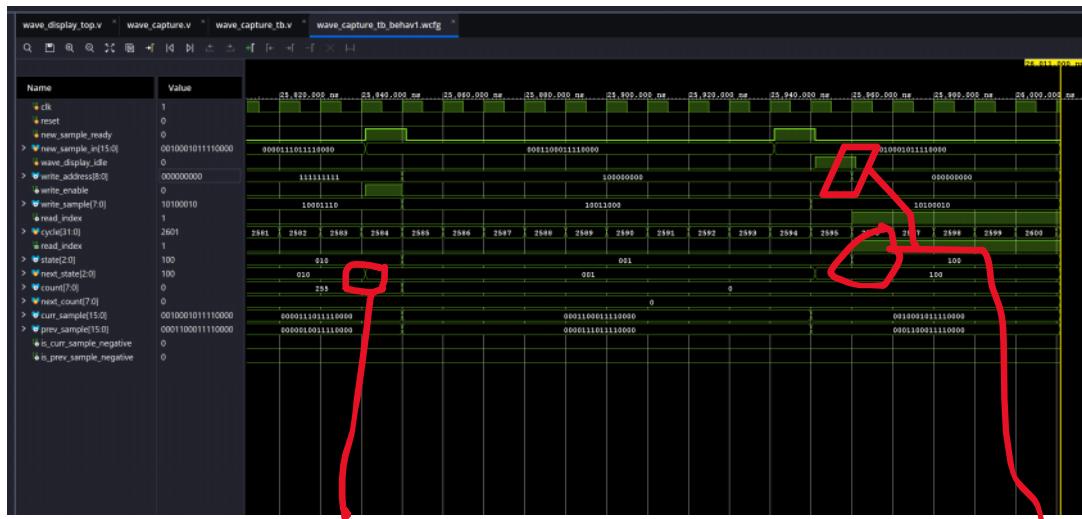
Tuesday, February 17, 2026 9:40 PM

## Wave\_capture annotated waveform/test\_bench





As expected from the timing diagram, on cycle 25, prev\_sample goes from 110... to 110... and curr\_sample goes from 110... to 010.... Similarly, on cycle 26, the state goes from ARMED to ACTIVE.



On cycle 2584, the state transitions from ACTIVE to WAIT, which is expected since it will have just finished processing 256 notes (count is 255)

As soon as wave\_display\_idle is turned on while in WAIT mode, it switches back to ARMED mode and flips read\_index from 0 to 1