Figure 1: Charges appearing in the N type bulk are extracted to a P type buried channel thanks to an electrical field, and are accumulated in pockets called potential wells generated by polarised electrodes. The movement of these pockets causes the charge to move.
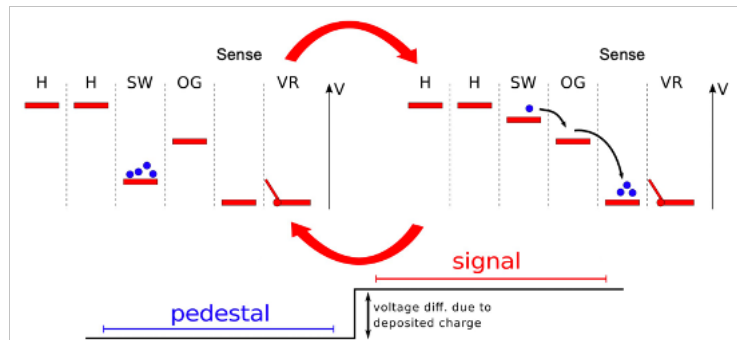

Figure 2: Correlated Double Sampling. The charges are moved back and forth under the sense thanks to the potential pocket principle. H, SW, OG and VR are electrodes.
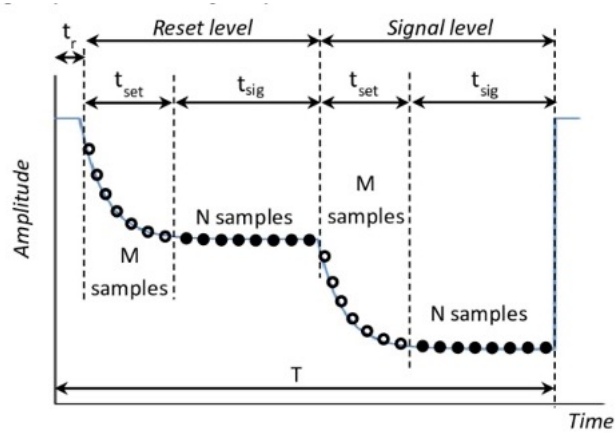

Figure 3: Signal oversampling and integration windows (tsig).
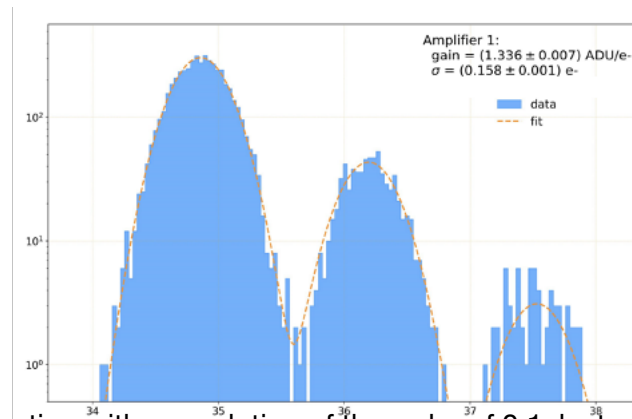

Figure 4: Charge distribution with a resolution of the order of 0.1electronRMS (for 1000skips) obtained with the new electronics.