**Latency Comparison (HLS Estimate and on-board)**

HLS latency estimate for each forward + backward pass : 75.2 us

HLS latency estimate for each forward + backward pass : 67 us

On board Latency for each forward + backward pass : 0.55 ms

Federated Learning Latency for 2 epochs (for training set of 2 images, including communication overhead for server-client and client-server): 38 s

As we increase the number of training images, the computation time will keep increasing, but the communication time for client-server and server-client will remain the same. So, communication overhead will become less significant with increasing number of training images.