

HLS for Your Design name

Group Number:

Group members with Roll Number:

The final report that needs to be submitted should contain the following:

1. **Description of the model.** Please write briefly about the ML model given to you along with the following data.

Task of model	Number of layers	Type of Layers	Other details

2. Changes made to make `keras2c` generated files synthesizable and a brief description of the change made.
3. Changes made to generate HLS4ML report if a pragma is removed in this process. For each of the removed pragma, a valid argument must be mentioned.
4. In a markdown cell of jupyter notebook mention all the issues that are faced(dependencies and versions) and solutions to resolve.
5. **Optimizations:** For each optimization applied (pragma), justify why it has been used.
6. **Results:**
 - Latency and area overhead table for Baseline (Unoptimized).
 - Latency and area overhead table for Optimized (if there are multiple versions like various tradeoffs, give all of them).
 - HLS4ML generated Latency and area overhead table.

- Finally, comparison report of both Optimized and HLS4ML generated report.

Provide the HLS results for each of the above scenarios in the below table.

Design	LUT	FF	DSP	BRAM	latency (min/max)	Clock period

7. All the modified `keras2c` generated files and HLS4ML jupyter notebook must be uploaded in a zip format.

Note: All the results that are placed will be reproduced by the concerned TA; any discrepancies result in marks deduction.