This checklist must be submitted as a PDF as part of your submission.

Name of Certifying Engineer(s): Romain TRILLING
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Name(s) of System Under Test: NUCLEO-U3C5ZI

Division (check one):
- ❏ Open
- ☑ **Closed**

Category (check one):
- ☑ **Preview**
- ❏ Available
- ❏ Research, Development, and Internal (RDI)

Benchmark(s) (check all that apply):
- ☑ **Visual Wake Words**
- ☑ **Keyword Spotting**
- ☑ **Image Classification**
- ☑ **Streaming Wake Word**

Please fill in the following table adding lines as necessary:

System Under Test Name	Benchmark	Accuracy/AUC
NUCLEO-U3C5ZI	Image classification (IC)	87.0% / 0.98
NUCLEO-U3C5ZI	Keyword Spotting (KWS)	90.2% / 0.99
NUCLEO-U3C5ZI	Visual Wake Words (VWW)	85.2% / 0.94
		FP / FN
NUCLEO-U3C5ZI	Streaming Wake Word	6 / 4

For each SUT, is the benchmark Accuracy/AUC target met? (Not a requirement for the Open division) (check all that apply):
- ☑ **Yes (Visual Wake Words … 80% Accuracy)**
- ☑ **Yes (Keyword Spotting … 90% Accuracy)**
- ☑ **Yes (Image Classification ... 85% Accuracy)**
- ☑ **Yes (Streaming Wake Word ...FP ≤ 8, FN ≤ 8)**

- ❏ No, for some combination of benchmark, scenario and SUT

For each SUT and benchmark, did the submission run on the whole validation set in accuracy mode? (check one):
- ☑ **Yes**
- ❏ No

For each SUT and benchmark, does the submission use the EEMBC Runner? (check one)
- ☑ **Yes**
- ❏ No

For each SUT and benchmark, is the same code run in accuracy and performance modes? (check one)
- ☑ **Yes**
- ❏ No

Are the weights calibrated using data outside of the official calibration set? (check one)
- ❏ Yes
- ☑ **No**

What numerics does the submission use? (check all that apply)
- ❏ INT4
- ☑ **INT8**
- ❏ INT16
- ❏ UINT8
- ❏ UINT16
- ❏ FP11
- ❏ FP16
- ❏ BF16
- ❏ FP32
- ❏ Other, please specify:

What backend does the submission use? (check all that apply)
- ❏ Vendor backend, please name:
- ❏ TF-Lite Micro
- ❏ Micro TVM
- ☑ **Other, please specify: STEDGEAI Internal Release**

Which of the following caching techniques does the submission use? (check all that apply, ideally none):
- ❏ Caching Inputs between iterations
- ❏ Caching responses between iterations
- ❏ Caching intermediate computations between iterations

Which of the following techniques does the submission use? (check all that apply, ideally none if submitting to the closed division.)

- ❏ Quantization aware training
- ❏ Wholesale weight replacement
- ❏ Weight supplements
- ❏ Discarding non-zero weight elements
- ❏ Pruning
- ❏ Modifying weights during the timed portion of an inference run
- ❏ Hard coding the total number of queries
- ☑ **None of the above**

Is the submission congruent with all relevant MLPerf rules?

- ☑ **Yes**
- ❏ No

If the answer to the above question is no, please explain:

For each SUT, have you filled out the JSON system description file?

- ☑ **Yes**
- ❏ No

For each SUT, does the submission accurately reflect the real-world performance of the SUT?

- ☑ **Yes**
- ❏ No

Does your submission include the following: (check all that apply)

- ☑ **System description file**
- ☑ **Code that implements the benchmarks**
- ❏ Code/scripts that train the model(s) (Open Division)
- ☑ **Metadata that describes each system-implementation combination tested**
- ☑ **Scripts that set up and execute each system implementation tested**
- ☑ **Result logs for each system implementation tested**
- ☑ **This Checklist**