

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

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Name(s) of System Under Test: EK-RA6M4, RX65N-Cloud-Kit

Division (check one):

- ☐ Open
- ☐ Closed

Category (check one):

- ☐ Available
- ☐ Preview
- ☐ Research, Development, and Internal (RDI)

Benchmark(s) (check all that apply):

- ☐ Visual Wake Words
- ☐ Keyword Spotting
- ☐ Anomaly Detection
- ☐ Image Classification

Please fill in the following table adding lines as necessary:

System Under Test Name	Benchmark	Accuracy/AUC
EK-RA6M4	Anomaly Detection	0.86
EK-RA6M4	Image Classification	87.5%
EK-RA6M4	Keyword Spotting	90.1%
EK-RA6M4	Visual Wake Words	85.4%
RX65N-Cloud-Kit	Anomaly Detection	0.86
RX65N-Cloud-Kit	Image Classification	87.5%
RX65N-Cloud-Kit	Keyword Spotting	90.1%
RX65N-Cloud-Kit	Visual Wake Words	85.4%

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 (Anomaly Detection ... 0.85 AUC)
- ☐ Yes (Image Classification ... 85% Accuracy)

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- ☐ 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:

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

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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