# 6 CONCLUSIONS

This report consists of a review of a conceptual design report solutions and picked solutions. The solutions are explained detailly, and comparison of the solution among alternatives are discussed.

In especial, overview of the systems is shown in V-Model with the system block diagram. Then, subsystems are given in a detailed manner with clarifications of the final solution, comparison of the CDR solutions, test steps and test results. The system has been merged into a prototype chassis. Thanks to that, tests are done on this chassis. Besides, final chassis is designed by the feedback of this chassis. Mentioned limitation in CDR are enhanced, as shown in the test result, even though they are existing. In addition to this, other non-problematic subsystems’ solutions are freeze. On the other hand, economic constraint which is 200$ is still higher than cost of the total project. The company believes that power of a company comes from its economic plans.

DUAYENLER will go on their hard work to enhance their design performance in every way, case and scenario. The company members believe that the final works will bring an innovative approach to the design of autonomous cars with its solutions and solution approach.

# Results of motors subsystem tests

Results of Motors Subsystem Tests

The tests are done. The results are negative because motors torque value did not match

with the declaration of the supplier. 3kg-cm is the decelerated value, but motors can

only produce 750 g-cm. Therefore, this system is failed in torque requirement, and reconsidered

in the following period.

RPM test has not been done since torque value is not supporting test setup.

9. Wheels Subsystem Tests

(a) Handling Test:

i. Place the vehicle on the path

ii. Apply a horizontal force

iii. Observe the behaibour

iv. If the vehicle is slipping, the test can be considered to be failure. If not,

the the test result can be considered as success. In other word, friction

between road and wheel should greater than road and ground.

10. Motors Subsystem Tests

(a) Torque Test:

i. Fix the motor at horizontal position with respect to ground

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ii. Attach an object of one kilogram @@ -1070,9 +1091,10 @@

iii. Contact the seller for more information