Goal/mission of this document: In this document, we will collect the EXAMPLE design for Autoware. The Reference Design will be put together after we have enough example design.

The document should serve as the instructions to build the vehicle, including hardware and software (?).

Organization of Reference Design WG Document:

* Reference Design for Education: F1tenth (Po-Jen, CoE), GoCart (Po-Jen, CoE), Kvaser Dev. Kit (David Walmroth), pixmoving (Mark/David Walmroth)
* Reference Design for R and D: pixmoving (Mark/David Walmroth), DanLaw (Rohit/David Cole),
* Reference Design for PoC: Autonomous Valet Parking (TievIV), Delivery Robot (TierIV)
* Reference Design for Racing: F1racing (TBD - Reach CJ)
* Reference Design for Open AD Kit: (will be prepared by Open AD WG)
* Reference Design for Commercial Services/Production
  + Multiple dimensions/tags:

- ODD:

- Cargo: TierIV (Yoshihito Takashima) / eveAutonomy

- Bus: LeoDrive (Armağan Arslan), ITRI (HueiRu), TierIV (Yoshihito Takashima), KWT Taiwan (Reene Lin/Daniel Shih),

- RoboTaxi: TierIV (Yoshihito Takashima)

- Low Speed (Utility) Vehicles: Turing Taiwan (David Shen/Daniel Shih)

- Delivery Robot: LeoDrive

- Autonomy Level: 3 ~ 5

- Reference design should include:

- Reference Hardware:

- Chassis: ev/internal combustion engine, gear,

- Computation Platform

- Sensors

- Software:

- Autoware Universe/Auto

- Operating System: Ubuntu, sel4, eSOL

- ROS:

- Infrastructure:

- Communication: CAN, Ethernet, WiFi, FlexRay, etc.

- Verification/Certification Methodology/Procedure

Schedule:

* Oct. 11: F1Tenth and GoCart
* Oct. 25: DanLaw
* Nov. 8: Cargo (TierIV)
* Nov. 22: