

Comments on Other Applications Utilizing ISAAC

IEEE 802.3 ISAAC Study Group
September 27th, 2023

Mehmet Tazebay
Broadcom Inc.

Overview

- The ISAAC group has extensively discussed the automotive imaging sensor applications during consensus building meetings and 802.3 WG approved a Study Group during July 2023 plenary meeting.
- The primary goal is to develop an Ethernet standard which is timely developed and cost & power efficient for automotive imaging systems.
- However in the last 802.3 ISAAC SG interim meeting, the industrial & building automation applications were proposed to be included in the PAR.
- These applications are out of scope because
 1. There were no discussions or contributions during ISAAC consensus meetings and also, no stakeholders spoke for these applications.
 2. They were not part of the CFI.
 3. Additionally,
 - Requirements for industrial applications may not be the same as automotive imaging systems
 - General system requirements & constraints (e.g., Speed, power and heat sensitivity, cable length, mechanical constraints, etc.).
 - Market potential is probably not the same as automotive imaging systems.
- Then, why are we trying to include a different application to an already well-defined application in ISAAC?
- After all, the SG and TF (when approved) will have a time-constrained project to develop for automotive imaging systems.
- Therefore, there is no reason or justification to expand the scope and risk the timely completion of this project.

Some Open Questions

- What is the overlap between automotive and these non-automotive applications?
- What are the requirements for the non-automotive applications that differ from those of automotive?
- What is the market potential for the non-automotive applications?
- What will be the impact on timeline if we add these applications to ISAAC?

Possible Options

- The group can continue to focus ONLY on the timely development of this project for automotive application.
- It may be also possible to re-utilize the target automotive solution for other applications as is. This is commonly done for different industries than the target one.
- If the other applications differ significantly from automotive then, any additional use case can be considered later as an extension of this project or as a new one.

Thank you!