Discuss for GSoC proposal
IC EG Proposal

• Create example for the RT-OS part in IC-EG architecture.

Data Flow – 1. ICCOM

ICCOM is responsible for vehicle signal handling which transferred from MCU (i.e. CAN).

- ICCOM socket shall be directly opened in application container, and not in the container host.
- Keeping advantage of peer to peer communication shall reduce latency and complexity.

https://github.com/Bosch-SW/linux-iccom
Discussion point

• What RTOS use?
  • In Previous discussion, will use NuttX or Zephyr. But…

<table>
<thead>
<tr>
<th>RTOS</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuttx</td>
<td>Not Available (R-Car port is lost…)</td>
</tr>
<tr>
<td>Zephyr</td>
<td>Will Available (check to date by Kurokawa-san now)</td>
</tr>
<tr>
<td>Others..(ex. Toppers)</td>
<td>Need to port in this project. It’s too heavy..</td>
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</tbody>
</table>

• We can choice Zephyr only now…

• Result of our discussion with Tanikawa-san, Kurokawa-san, Haraki-san, Taguchi-san and others.
  • Can we get device driver?
    • Can get linux side Bosch iccom middle ware.
    • Can’t get Renesas iccom driver, it’s proprietary software…
    • Can get Zephyr side CAN driver.

• Have a another issue?
  • Too heavy to GSoc in this year.
    • Up to 180h only…
Estimate to working time

- This estimate based on existing Kusakabe-san work
  - https://www.slideshare.net/YuichiKusakabe/rcar-h3nuttx
    - Japanese only…
  - It’s require to..
    - NuttX porting (case of kusakabe-san)
      - Research for how to port NuttX to R-Car H3.
        - 20 day (May not need)
      - Implementations
        - 20 days (May need)
          - This work is including reworking for linux side implementations. ex. fix to device conflict.
    - Renesas iccom (case of kusakabe-san)
      - Research for how to port Renesas iccom.
        - 5 days (May need)
      - Implementations
        - 5 days (May need)
    - Others
      - Bosh iccom for Zephyr
        - May need 10 days.
  - This work may require 40 days
    - This work require to 320h…Too heavy…
My conclusion

• Give up to this proposal in this year.

• To be discuss in next year.