AGL Instrument Cluster EG update and plan for 2022
AGL Instrument Cluster

• AGL Lamprey released in July/2021.
  • Upstreaming start.
  • Most basic integration feature was merged.
  • This release support container integration using Yocto.

• AGL Marlin released in Mar/2022.
  • Some common software merged.
  • Some development issue fixed.
  • Some demo software merged to evaluate AGL Instrument Cluster architecture.
Status for Lamprey release

- Most basic integration feature was merged.
  - Limited container host and cluster container are available.
  - Separate cluster feature into container.
  - Display isolation feature is integrated. But it support single display only.
  - Demo GUI is available. It support standalone demo.
  - Support container image build using Yocto.
  - R-Car H3/M3 starter kit without kingfisher board support only.

<table>
<thead>
<tr>
<th>Other Container</th>
<th>IVI Container</th>
<th>Cluster Container</th>
<th>Safety Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Container host</td>
<td>Container runtime</td>
<td>Linux Kernel</td>
<td>RTOS / Non-OS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SoC (R-Car Gen3)</th>
<th>MCU</th>
</tr>
</thead>
</table>

Demo Display 1920x1080

R-CarH3
Status for Marlin release

- Some common software merged.
  - IC service framework.
  - Multiple display support.
  - Guest networking support.
  - Firmware downloading.
  - Input device support for IVI container.

- Some demo software merged.
  - IC service for demo.
  - IVI demo software stack.

- Extended board support.
  - R-Car H3/M3 starter kit with kingfisher
  - Ref-hw
Some demo software merged.

- IC service framework is already merged in master branch.
  - We develop reference cluster service framework.
  - Ref-GUI draw speed meter, telltale and more vehicle information, available.

- IVI container is now developing.
  - Sample Navigation, Media Player, Home UI are already merged.
  - These are running on weston with IVI extension.
  - These software are only for demo and evaluation for container environment. Will replace AGL IVI profile based software in future release.
Some demo software merged

• In initial release at Lamprey, IC software stack run on R-Car H3/M3 Starter Kit with Full HD Display only.

• In Marlin release, IC software stack with demo IVI run on R-Car H3/M3 Starter Kit on Kingfisher board with two Display.

• AGL Ref-HW support merged.
Dropped feature at Marlin

• Dropped feature
  • Pipewire integration
    • Feature development was completed by contractor work in y2021.
    • Will update in miner release.

• Migrate AGL compositor from Weston in IC
  • Feature development is on going in contractor work in y2022.
  • Will update in NN or OO release.

• IC Service implementations
  • IC service framework has some structured issue.
  • It’s blocked IC service implementations.
  • Will work in y2022.

• Documentations
  • Will update in miner release.
New task for this year

• Good practice sharing.
  • IC EG work is including some experimental containerization. But this information is not sharing all in AGL. Will documented it.

• Continue to develop how to handled input devices.
  • Marlin release is including input device support in IVI demo guest, But it is not mach real use case, only to demo implementations.

• Continue to develop how to handled dynamic devices.
  • ex. uevent injections.

• Continue to work OSS assessment.
  • This task entry to contractor work candidate in this year.
Other task

• Maintain for AGL IC profile
  • Ref-GUI adopt to Qt 5.15
  •

• Migrate IVI guest from our code dorp demo to AGL new IVI with new AppFW and flutter.
  • For CES2023 demo?
Thank You