





### **Reference Hardware Schedule**



## Next Step (Aug 2017)

Towards Open Draft [OEM]

- Complete the list of peripheral devices & function allocation.
- Clarification of the functional scope in AGL.
  - RSE
  - Cluster / HUD
  - Emergency call





## Next Step (Sep 2017)

Towards Open Draft [OEM]

- Define the hardware specification draft
  - Rough block diagram of Ref-HW
    3 kinds Ref-HW? (Luxury/Middle/Low)
  - Special requirements
    - Adopt at least 2 kinds of SoC



now in progress

- 2 boards constitution : Main board + Extension board
- Main and Ext boards can be combined freely with COMMON I/F.
- Define the software specification draft
  - AGL specification to operate on various IVI system configurations (Selector, Vehicle Data Abstraction etc.)
  - Additional function to AGL platform (in-deck decode etc.)
- → Summarize and announce it as "Reference Hardware Open Draft"

### Future Plan (Oct-Dec 2017)

Towards Ver1.0 specification [OEM+Tier1/SoC]

- Recruit Tier1 and/or SoC vendors
- Define the hardware specification Physical design of Ref-HW (HW block layout, communication I/F, ...)
- Define the software specification SW design to operate Ref-HW Some of EGs already started discussion related with this topic.
   ex. "Selector" has a close relationship with Audio Management Arch. (under discussion in UI & Graphics EG)

→ Summarize and announce it as "Reference Hardware Specification 1.0"

GRADE

## Future Plan (2018)

Towards Ref-HW development [OEM+Tier1/SoC]

- Reference Hardware development
  - Board development ... Tier1 or SoC vendor
    - 3 kinds of demo systems? (Luxury/Middle/Low)
    - at least 2 kinds of Main Board
- AGL Software development
  - Device driver / HAL layer (BSP) ... Tier1 or SoC vendor
  - AGL UCB (for FF\*) ... Community \*AGL 6.0.0:Funky Flounder

...?

- Application (if required)
- → Construct Demo System for CES 2019. Show AGL UCB(FF) is running on Ref-HW boards (Luxury/Middle/Low)

## Major Policy of Reference Hardware

- (1) Two boards constitution : Main board + Extension board
  Main Board (SoC Board) ... AGL common feature
  Extension Board ... OEM specific feature
- (2) Interchangeable Main Boards
  Covering various SoC grades / various SoC vendors
- (3) Interchangeable Extension Boards
  Covering various types of Cars / various OEMs
  (Replaceable with OEM specific boards)



Scope of

**RHSA-EG** 



#### Realizing POLICY (1) and (2) as a first step.



# Define Reference Hardware <Step2>

Realizing POLICY (3). It can reduce the GAP between Ref HW and product HW.



### Example : Reference Hardware (Low)



### Example : Reference Hardware (Middle)



### Example : Reference Hardware (Luxury)



### Example : Reference Hardware (Luxury+)

Future Plan

