



DEVELOPMENT SPRINT REVIEW

CALENDAR WEEK 08.22

HIGHLIGHTS:

- Chassis: GD&T concept for SVC3 → Done
- Crash and Safety: Individual hardware demands (bucks+BIW) → Done
- EE/DES: GD&T concept for SVC3 → Done
- SVCs Build planning alignment for NVH / ongoing
- AVAS Sound test (functionality and 1st tone proposals) completed

IN PROGRESS:

- Infotainment: GD&T concept for SVC3
- SCCM dbc file received but affects the CAN communication of the vehicle

LOWLIGHTS:

- ACC development decision: after internal reviews, ACC as a feature won't be integrated into the Sion for now. ACC was always "under review" and therefore never confirmed as a feature on the fact sheet or website. Still a tough decision, as everyone internally really likes the feature. We plan to offer it at a later date.

BODY STRUCTURE

HIGHLIGHTS:

- Series Supplier Sheet Metals
 - LOI signed
 - Visit to Sono office
 - Series quote in place
 - Reduction of sheet metal tooling costs

IN PROGRESS: None

LOWLIGHTS: None

INFOTAINMENT (1/2)

HIGHLIGHTS:

SVC3

- Expected delivery date received and completed
- Analysis of potential rear USB (front USB unchanged) → now 12V outlet as solution in the rear. Customers can e.g. charge their phones via standard adapter there as well

VCM

- Pre-release testing to read firmware versions through UDS and provision testing with temporary certificates have been successful so far.
 - Test results for both to be delivered in the next sprint.

INFOTAINMENT (2/2)

IN PROGRESS:

- Infotainment head unit
 - Currently waiting for supplier side testing to be completed on alpha boards
 - New engineering service provider for eCockpit software development

- VCM
 - VCM functional requirement still WIP
 - Changes are still being made, but priorities on remote commands are established.
 - VCM for SVC3 have an error in the molding, can be fixed manually
 - Changes will be made in tooling to fix for SVC4.

LOWLIGHTS: None

CHASSIS (1/7)

HIGHLIGHTS:

- 3D model from supplier → Done
- To work out calibration / Sw release & DVP plan for SVC 3 delay with BWI → Done
- Mesh data for crash analysis → Done
- Adjust hole size in bracket → Done
- Alignment of interface between with supplier for the EVAC & Fill Process → Done
- Anti Roll Bar -2 → Done
- Body block test part of ECE R12 → Done
- Booster feasibility study for SVC 3 → Done
- Bracket design for hose → Done
- Brackets supplier strategy → Done
- Brake connector pipe design → Done

CHASSIS (2/7)

- Brake lines readiness → Done
- Brake pedal supplier booster → Done
- Brake pipe design → Done
- BWI internal gap analysis workout → Done
- CAE mesh of parts → Done
- CEPS 2D release → Done
- Chassis test and validation time plan template → Done
- Clip design → Done
- ESC proposal initial discussion → Done
- Cost agreement after the final design → Done
- Create 3D model for BIW reinforcement bracket → Done
- Development activities → Done

CHASSIS (3/7)

- Disc design freeze → Done
- Droplink hard quotes → Done
- DT data from supplier → Done
- DT document update → Done
- Durability profile inputs → Done
- DVP test numbers agreement → Done
- Supplier coil spring drawing approval & MRD dates for SVC3 → Done
- Fastener spec → Done
- Freeze CAN matrix for first SWR for LabCar → Done
- GD&T model for rear axle finalization → Done
- Generate test loads based on VRLDA → Done
- Get 3x & 1x brake line clip → Done

CHASSIS (4/7)

- Get feedback from BIW team / supplier → Done
- Get spindle hard quotes → Done
- Homologation drawings → Done
- Hose connector design → Done
- Implement brake line clips → Done
- Interface agreement from the stakeholders → Done
- Interface requirement for brake pedal switch → Done
- Intermediate shaft fastening strategy → Done
- Kickoff PO for parts → Done
- Kickoff spindle testing discussion → Done
- Knuckle stiffness target alignment → Done
- Knuckle testing-road load data → Done

CHASSIS (5/7)

IN PROGRESS:

- 2D drawings for strut and shock absorber supplier - review and feedback → In progress
- Align with supplier for ESC functions → In progress
- BOM for sub frame - material alignment → In progress
- CEPS mechanical - 2 → In progress
- Chassis test and validation - 1 → In progress
- Define test method for rear twist beam → In progress
- Feasibility check to add spring plastic sleeve → In progress
- Finalize brake hoses & pipes → In progress
- Front coil spring design confirmation → In progress
- Front subframe development -1 → In progress
- General steering - 3 → In progress

CHASSIS (6/7)

- Homologation - M → In progress
- Longitudinal motion control alignment → In progress
- Nominate Autoline for brackets → IN PROGRESS
- Rear axle spindle mounting plate machining & welding sequence → IN PROGRESS
- Rear twist beam development -1 → IN PROGRESS
- Requirement and its management - M → IN PROGRESS
- Requirements for Interfaces → IN PROGRESS
- RFQ release for rear coil spring for supplier → IN PROGRESS
- S - align development of other ECUs and ESC → IN PROGRESS
- Share prio joint request sheets → IN PROGRESS
- Sion chassis history → IN PROGRESS
- Software and functional timeline - S → IN PROGRESS

CHASSIS (7/7)

- Steering fasteners → IN PROGRESS
- Steering vehicle DVP to be confirmed → IN PROGRESS
- SVC3 build-1 → IN PROGRESS
- Test and LC development- L → IN PROGRESS
- Getting the booster quote from supplier → IN PROGRESS
- VRDLA - loop 2 (based on MBS update) → IN PROGRESS

LOWLIGHTS:

- Detailed design confirmation for supplier booster & vacuum sensor
- Cybersecurity internal targets

HIGHLIGHTS:

- E/E integration:
 - Body electronics:
 - All components released for SVC3 (EDS-1694)
 - LabCar: Most connectors are now attached to the wiring harnesses
 - BCM software release plan for series finished
 - PACE software release plan for series finished
 - GEM software release plan for series finished
- CAD integration:
 - GEM SVC3 box design progressing rapidly this sprint

E/E (2/5)

- Wiring harness:
 - Internal SVC3 design checklist refinement finished
 - Successful on-boarding of EDS engineer
 - Kick-off production of wiring harnesses at supplier

IN PROGRESS:

- E/E integration:
 - Body electronics:
 - ACC decision has an impact on steering wheel buttons configuration
 - Charging/discharging details not completely defined, affecting Body CAN
 - SCCM dbc file finally received but affects the CAN communication of the vehicle
 - Current brake light switch to be used in the SVC3 only → series intended brake light switch was refused by chassis team

- Wiring harness:
 - Quality of drawings from supplier have no good quality → slow down progress
 - Access to Catia & 3Dx causes time problems
 - Grommets: Did not receive full and updated design from supplier, because of their manufacturing alignment
- CAD Integration:
 - SVC3/SVC4 structure differentiation is causing issues with suppliers and slowing down 3D design
 - New BLS switch may cause close contact / clash condition with thermal, need to review

LOWLIGHTS:

- E/E Integration:
 - Body electronics:
 - Headcount: DVP and testing engineers missing; important for SVC3 commissioning and testing
 - Testing and commissioning of SVC3 while developing SVC4 → Capa
 - SCCM: Dynamic movements have to be aligned with interior team
- Wiring Harness:
 - Understanding the release process → in contact with experts to solve this.
 - BOM issue (missing information from EDS) → solved.

- CAD Integration:
 - SVC3 BOM split, because fixing SVC3 CAD data and meanwhile working on SVC4 → Fully defined SVC3 BOM split would help
 - Recent Catia/3DX update caused some issues with the team → IT tickets raised

HIGHLIGHTS:

- Collaboration (driveshafts) very efficient
- Headcount done
- Good progress with validation plan

POWERTRAIN (2/2)

IN PROGRESS:

- Misunderstanding with supplier regarding FEM (Crossbeam)
- Tasks demand more time than planned (supplier work)

LOWLIGHTS:

- CAD license issues → need help here from PM standing in for HV Battery is taking up time FuSa drivshafts → update PPAP
- Define torque value is difficult, because need feedback from supplier

BI-DIRECTIONAL

HIGHLIGHTS:

- We hired a validation engineer, starts in June.
- First OBC samples will be delivered at the end of March
- Meeting with supplier for bidirectional charging planned

IN PROGRESS:

- Risk of not achieving maximum charging speeds with OBC for SCV3.

LOWLIGHTS:

- No requirements for diagnostic systems on vehicle level available.
- No requirements for cybersecurity on vehicle level available.

HIGHLIGHTS:

- SVCs build planning alignment for NVH ongoing
- Interior support for NVH package SVCs and series
- Procuring of dedicated materials in progress, ongoing
- AVAS sound test (functionality and 1st tone proposals) completed
- Sound designers audited, decision in discussion
- Recruitment closed, new starter next sprint, PO signed

IN PROGRESS:

- Jira link to requirement - WIP
- DVP update with new vehicle planning
- POs for NVH equipment in negotiations

LOWLIGHTS: None

WEIGHT

HIGHLIGHTS:

- Link to Jira sprint

IN PROGRESS:

- Jira link to the requirement board still ongoing (VTS related topics still open)
- Jira sprint view in weight management confluence page still ongoing
- PKGO related tickets were postponed to CW10.22 due to priority and current capacity

LOWLIGHTS:

- Input source: BOM attributes Part_Source and estimated weight