



Declaration of Changes NTG6N ENTRY/MID

Change content

- Overview
- Detailed changes

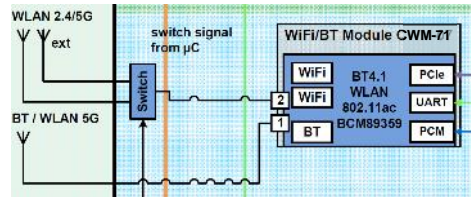
ONE BLOCK VARIATION

	Idea from	Car lines	Variants
Removal bumper antenna	DAIMLER	ALL	ALL
Replace HDD with UFS	HARMAN	ALL	MID, HIGH, TV
Replace DC/DC Intersil ISL78233	HARMAN	ALL	ALL
Technology update	HARMAN	ALL	ALL

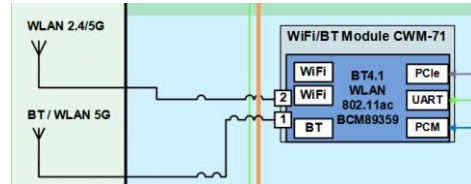
Removal bumper antenna

Block diagram

D8:



D9:



Background

- Idea from DAIMLER, defined in RFI-591 for MID and RFI-592 for HIGH/TV.
- Bumper antenna was an early design concept, never realized.

HW/Mech

- Minor Layout change and SW adaption
- Dual-FAKRA remains to be backward compatible
- Global certification required

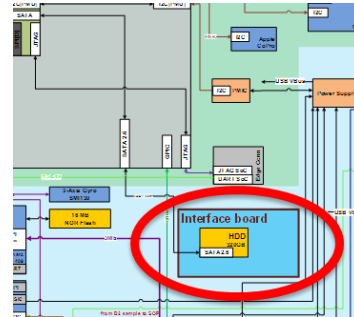
Note:

the bumper antenna refers to the antenna port #2 in the technical description documentation. Even if the antenna fakra port is present, there is no internal connection.

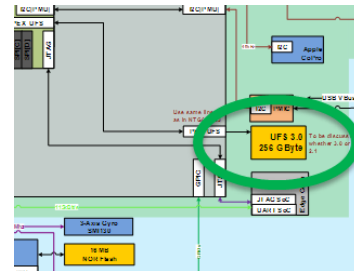
Replace HDD with UFS

Block diagram

D8:



D9:



Background

- Idea from HARMAN.
- Replace dated technology HDD with affordable state-of-the-art UFS 2.1 technology.
- Quality and cost improvement.

HW/Mech

- Data content of HDD -> UFS remains unchanged
- Currently considered UFS 2.1 components:
 - Micron MTFC256GASAONS-AIT 64 2.1 FW, p/n 3724514
 - Samsung KLU6GAJ1ZD-B0CQ 256GB 14 2.1, p/n 3265609
- Nvidia support / qualification is required and confirmed
- Production process: flashing of entire unit will happen in run-in with wired WiFi, HDD-cloning obsolete, PDI cells modified with identical concept

Technology update

Specific changes:

- Replace ISL78233 with TI TPS62812 on MMB
- Replace ISL78233 with TI TPS62813 on BB
- Replace ALG8589 with MLP MQP4420
- Replace big-size KeKo with AI-Ko
- Replace other aged components

Justification:

- Replace aged components by recent ones
- Keep HARMAN component portfolio up to date

Details:

- Components are already verified and used in other HARMAN products.
- Components from alternative supplier considered



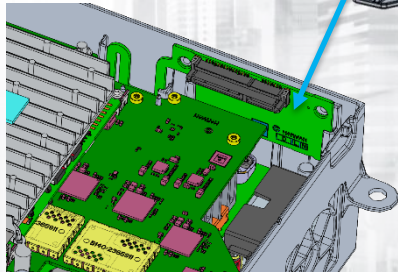
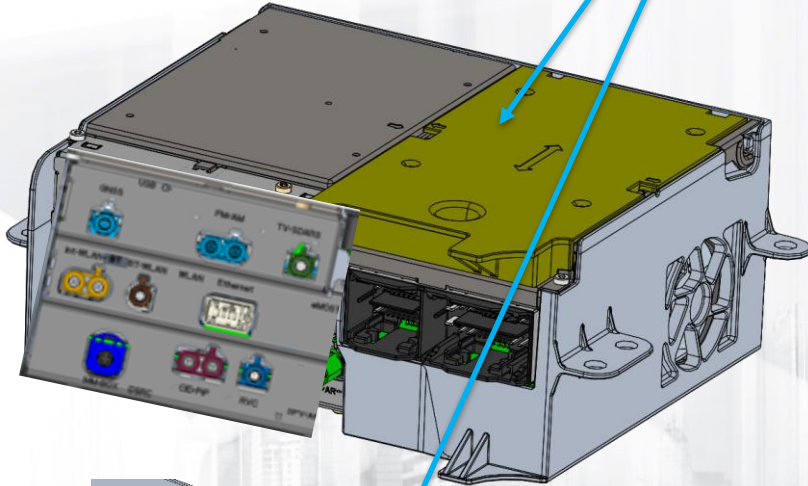
MECHANICS

Replace of HDD by UFS

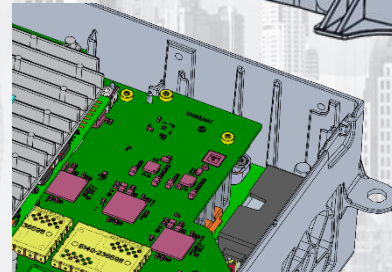
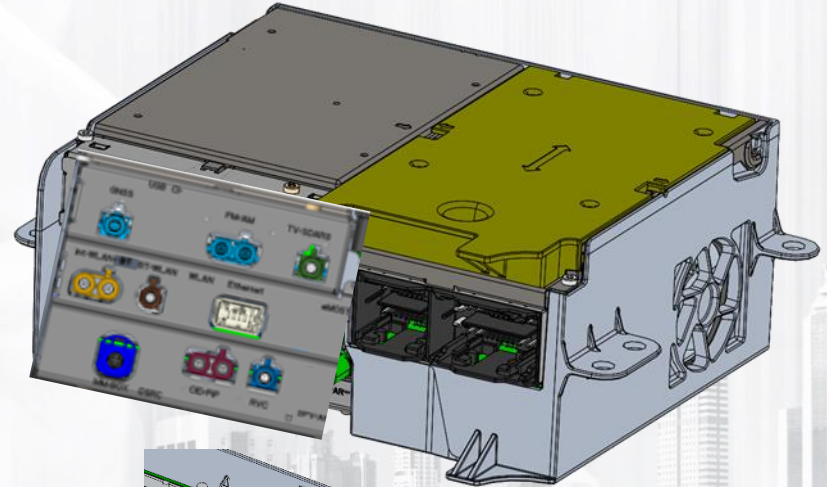
D8

Removal of HDD; HDD slider new material

Removal of PCB 9048



D9





THANK YOU