

Declaration of changes from Initial (HH63AF) to Variant (HH63AF)

● SOFTWARE MODIFICATIONS:

- Protocol Stack changes: NO
- MMS/STK/USAT/USIM changes: NO
- DM/SUPL/VT/FUMO/SWP/HCI: NO
- Other changes detailed: NO

● HARDWARE MODIFICATIONS:

- Baseband changes: **NO**
- Band changes: **NO**

Product	GSM	UMTS	LTE
HH63AF	NA	NO	NO
HH63AF	NA	NO	NO

- Antenna changes: **HH63AF support two external antennas, support transmission and reception.**
- PCB Layout changes: **NO**
- Main components changes: **NO**

	Base Band	Transceiver	ASM	Power Amplifier	Tx SAW Filter	Rx SAW Filter (SAW Duplexer)
UMTS FDD I	NO	NO	NO	NO	NO	NO
UMTS FDD II	NO	NO	NO	NO	NO	NO
UMTS FDD IV	NO	NO	NO	NO	NO	NO
UMTS FDD V	NO	NO	NO	NO	NO	NO

	Base Band	Transceiver	ASM	Power Amplifier	Tx SAW Filter	Rx SAW Filter (SAW Duplexer)
LTE B2	NO	NO	NO	NO	NO	NO
LTE B4	NO	NO	NO	NO	NO	NO
LTE B5	NO	NO	NO	NO	NO	NO
LTE B7	NO	NO	NO	NO	NO	NO
LTE B28	NO	NO	NO	NO	NO	NO
LTE B66	NO	NO	NO	NO	NO	NO

	Antenna	AP	MODEM	Transceiver	Balun	Band pass filter	diplexer
WiFi	NO	NO	NO	NO	NO	NO	NO

- WiFi changes: No

- Other components changes: **HH63AF adds two SMA connectors to support external antennas. The addition of an external antenna does not affect the wifi part, only the cellular part.**
- Other changes detailed: No

Accessories	HH63AF	HH63AF	Remark
Charger	NA	NA	
Battery	NA	NA	
USB cable	NA	NA	
Headset	NA	NA	

➤ MECHANICAL MODIFICATIONS:

- Use new metal front/back cover or keypad: NO

- Mechanical shell changes: NO
Whole size of EUT: NO
Distance of Ear reference point to bottom of handset: NO
Other trinkets to change the surface of handset: NO
- Other changes detailed: The HH63AF back cover has 2 external antenna openings

APPROVED BY:

Project Manager: Patrick MA

A handwritten signature in black ink, appearing to read 'Patrick MA', with a stylized, cursive script.

Signature:
Date:2023.02.06