

Ford Smart Cockpit BT Solution

BU RN1 SYE

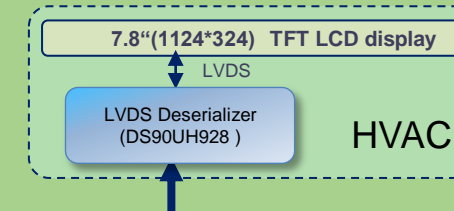
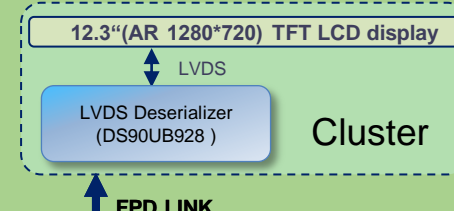
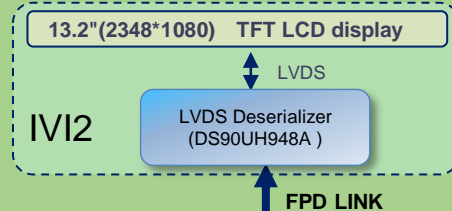
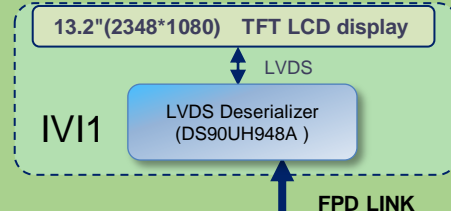
No photos

Smart Cockpit CD 542C W/4 Screen Solution Proposal (HDMI Drive 2 Screens)

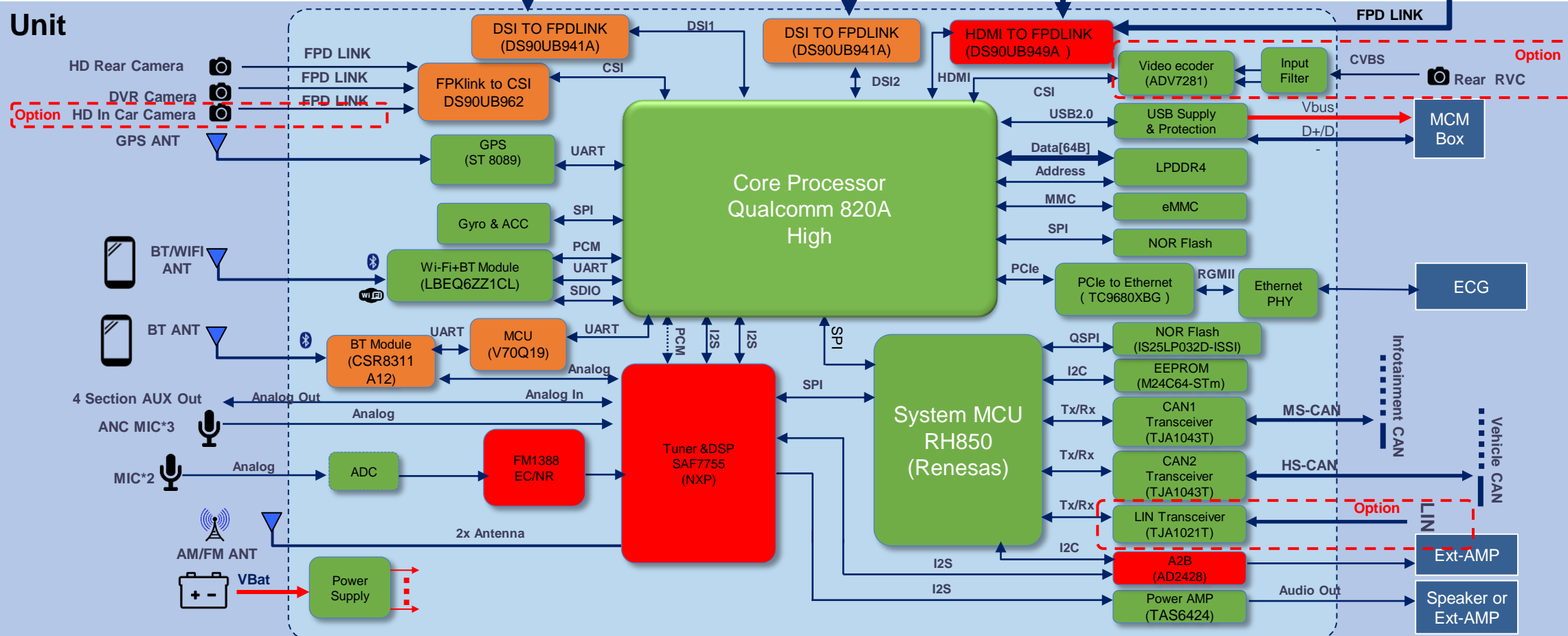
Note:
HVAC Display must use TI 928
Des. IC and Split display info
for HVAC display content .

Displays

Note
Reuse
Modify
New



Head Unit

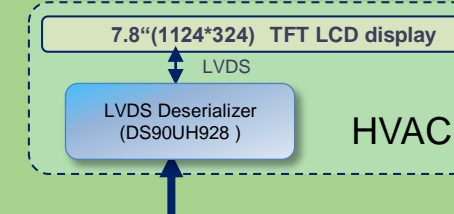
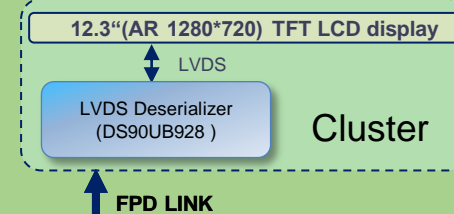
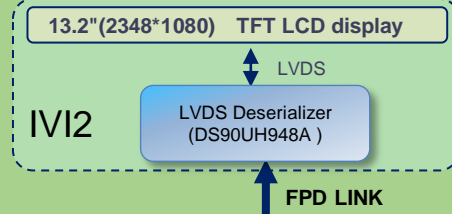
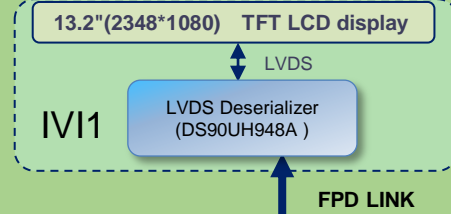


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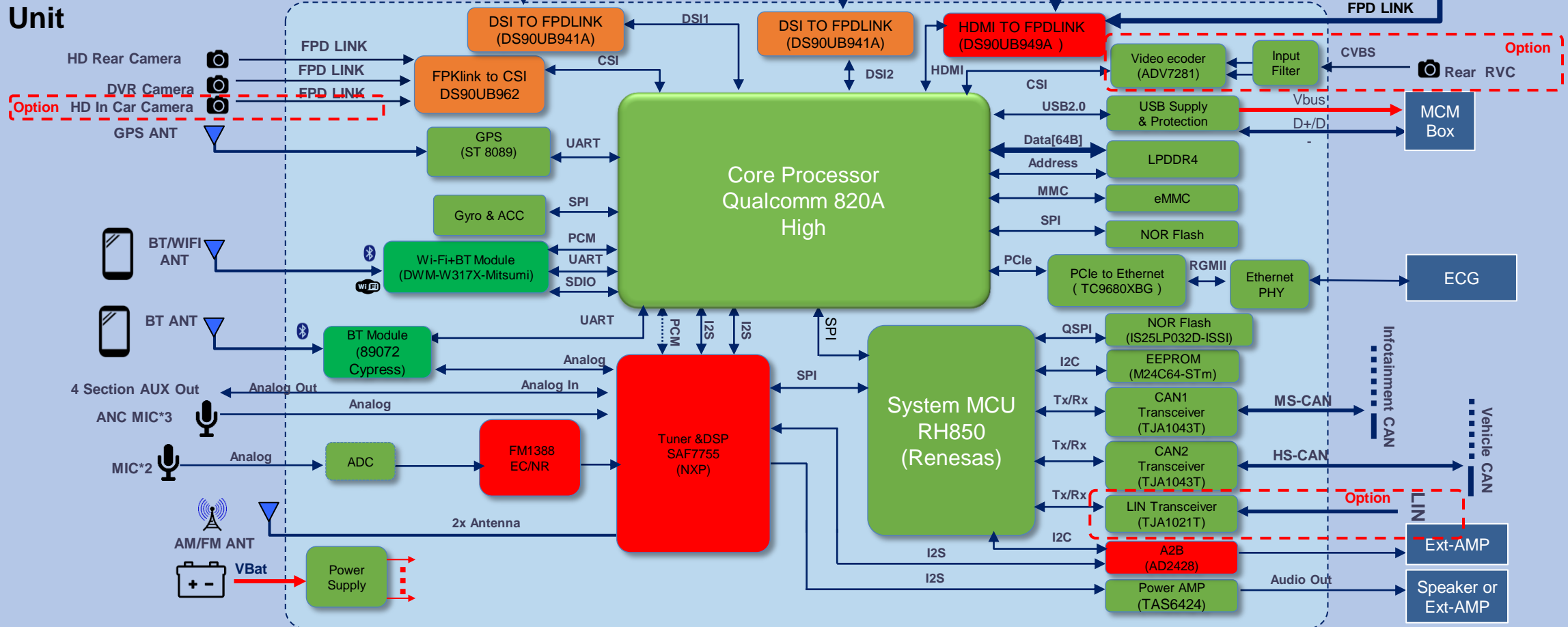
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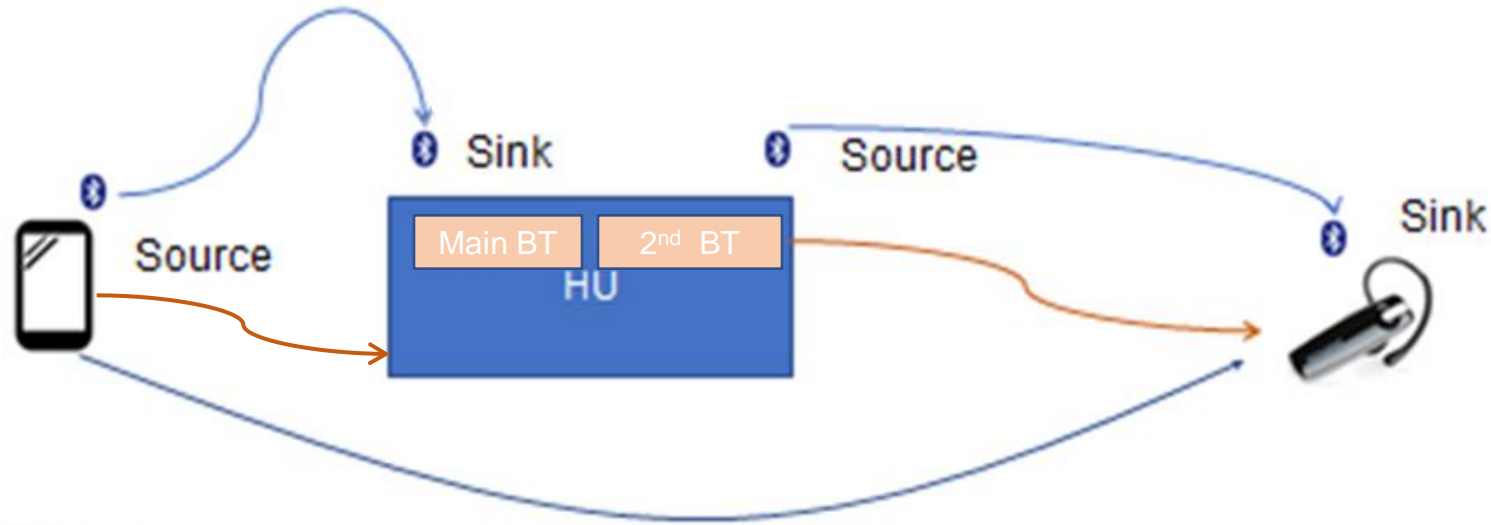
Key components and respective specification

Type	Description	Supplier	AEC-Q100 (Chip)	Remarks
MCU	RH850	Renesas	AEC-Q100	F1K 144Pin
SOC	820A	Qualcomm	AEC-Q100	High for CD542C SCL for CX727C & Single Display 542C
NOR flash	W25Q64FVSSAQ	Winbond	AEC-Q100	High Temp. up to 105℃
eMMC	THGBMHG8C4LBAAR	Toshiba	AEC-Q100	32GByte
LPDDR4	MT53B512M32D2GZ/ MT53B384M32D2DS	Micron	AEC-Q100	2X2G for CD542C 2X 1.5G for CX727C
Tuner & DSP	SAF7755	NXP	AEC-Q100	
A2B	AD2428	ADI	AEC-Q100	
Power Amplifier	TAS6424	TI	AEC-Q100	Class D
Bluetooth/WiFi module	DWM-W317X	Mitsumi	AEC-Q100(chip)	Cypress88373
Video Decoder	ADV7281	ADI	AEC-Q100	Option
NorFlash	IS25LP032D	ISSI	AEC-Q100	4MB
USB Power & Protection	TPS2553	TI	AEC-Q100	W/ MCM use
Antenna Phantom Supply	TPS7B7702	TI	AEC-Q100	
GPS	STA8089	ST	AEC-Q100	GPS + Beidou
PMIC	PMM8996AU	Qualcomm	AEC-Q100	

Key components and respective specification

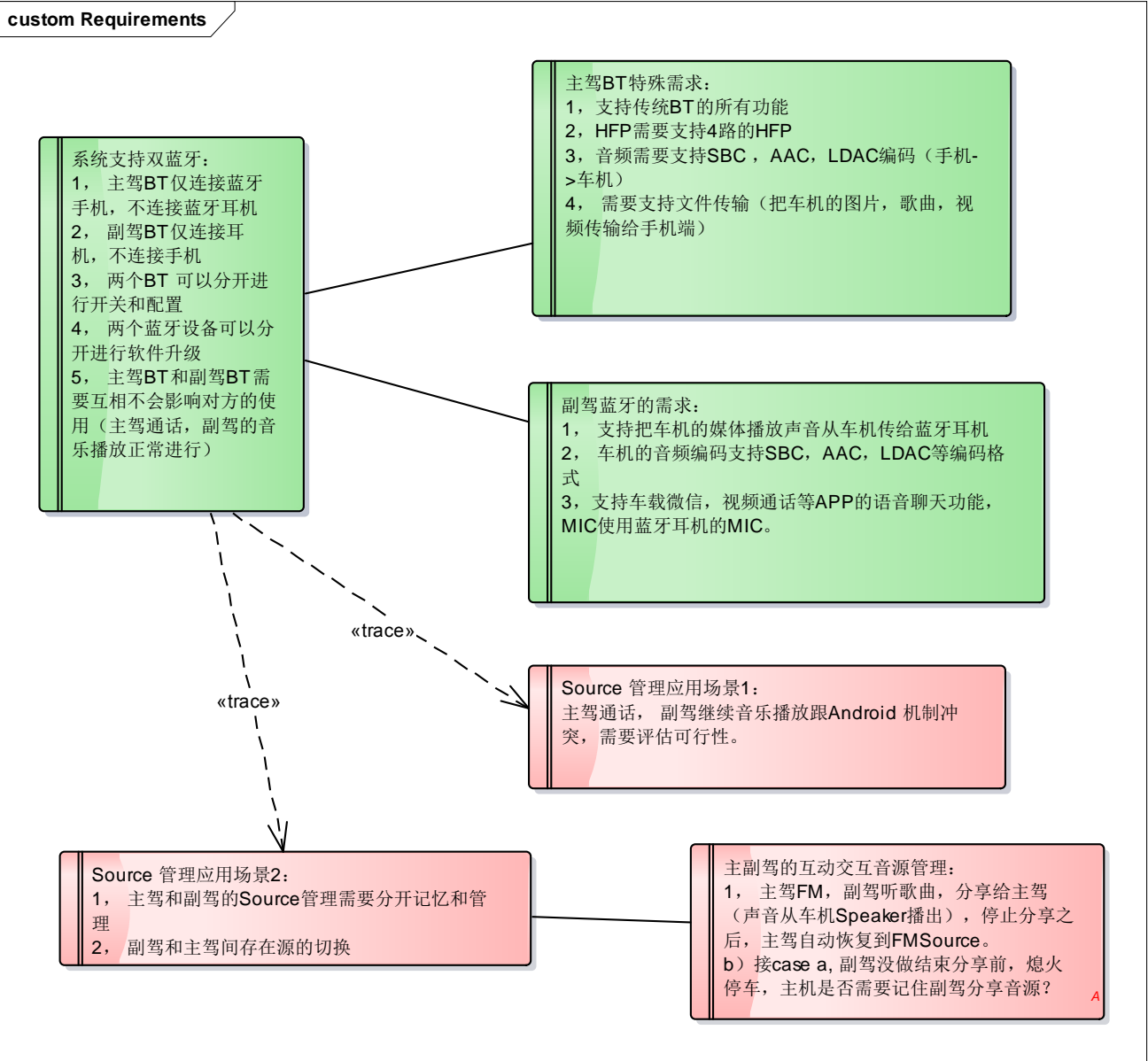
Type	Description	Supplier	AEC-Q100 (Chip)	Remarks
DSI2FPDLink	DS90UB941A	TI	AEC-Q100	
FPDLink2CSI	DS90UB962	TI	AEC-Q100	For 542C only
HDMI2FPDLink	TJA1021T	NXP	AEC-Q100	
Power IC DCDC	MPQ9840	MPS	AEC-Q100	
LIN	TJA1021T	NXP	AEC-Q100	
PCIe2Ethernet	TC9560XGB	Toshiba	AEC-Q100	
Ethernet PHY	TJA1100	NXP	AEC-Q100	
MIC ECNR	FM1388	fortemedia	AEC-Q100	
FPDLink2CSI	DS90UB954	TI	AEC-Q100	For 727C only
2 MAC BT/WiFi Module	LBEE6ZZ1FD	Murata	AEC-Q100	For Refer RFQ
Gyro & ACC	ASM330LHH	ST	AEC-Q100	
HDMISplit2LVDS	DS90UB949A	TI	AEC-Q100	For 542C Screen
IVI2 BT Chip	89072	Cypress	AEC-Q100	BT Stack also run on SoC

BT Requirement

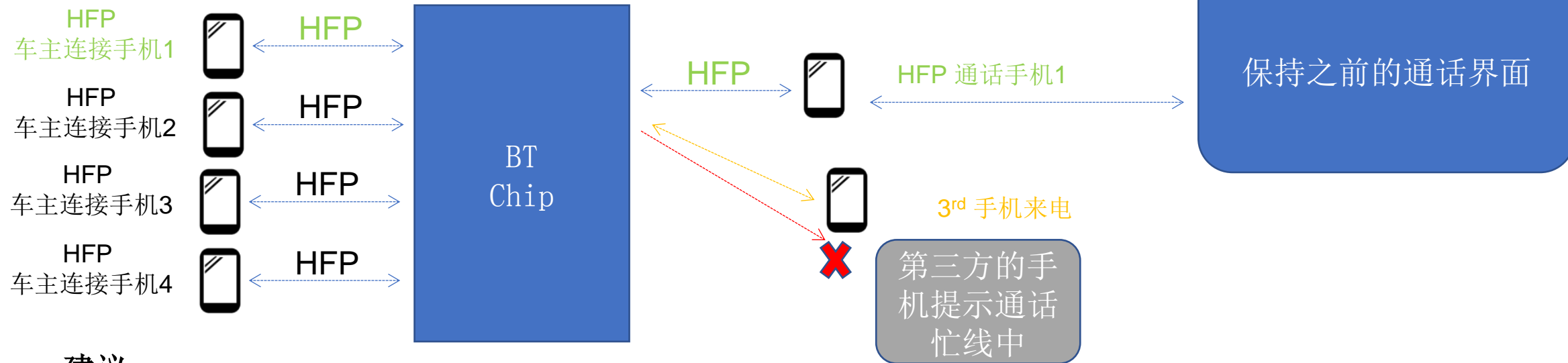
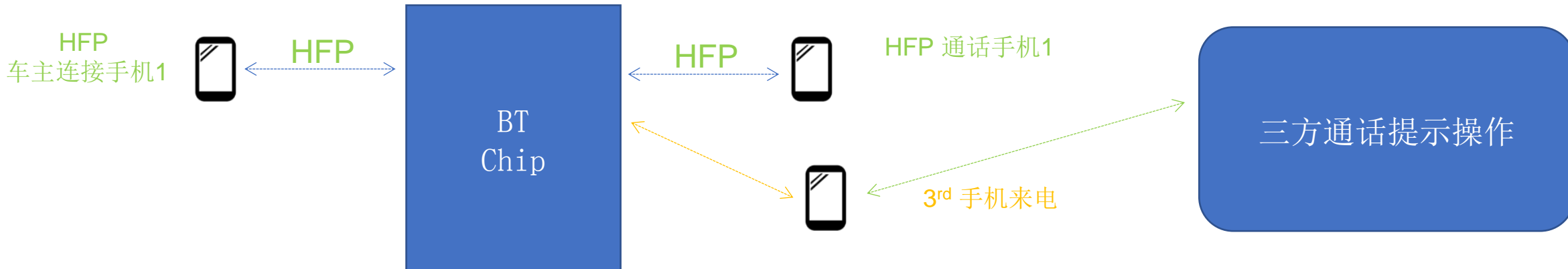


User case :

- 1, Phone connect to HU , Phone work as Source , Hu work as Sink.
- 2, Bluetooth headset connect to HU , HU work as Source , Bluetooth headset work as Sink.
- 3, HU(Source) play Media and transport A2DP data to headset(Sink).
- 4, All 4.HFP connect to Main BT Chip (need support 4 phones)
- 5, Audio need support LDAC



4 HFP Solution (Desay 建议)

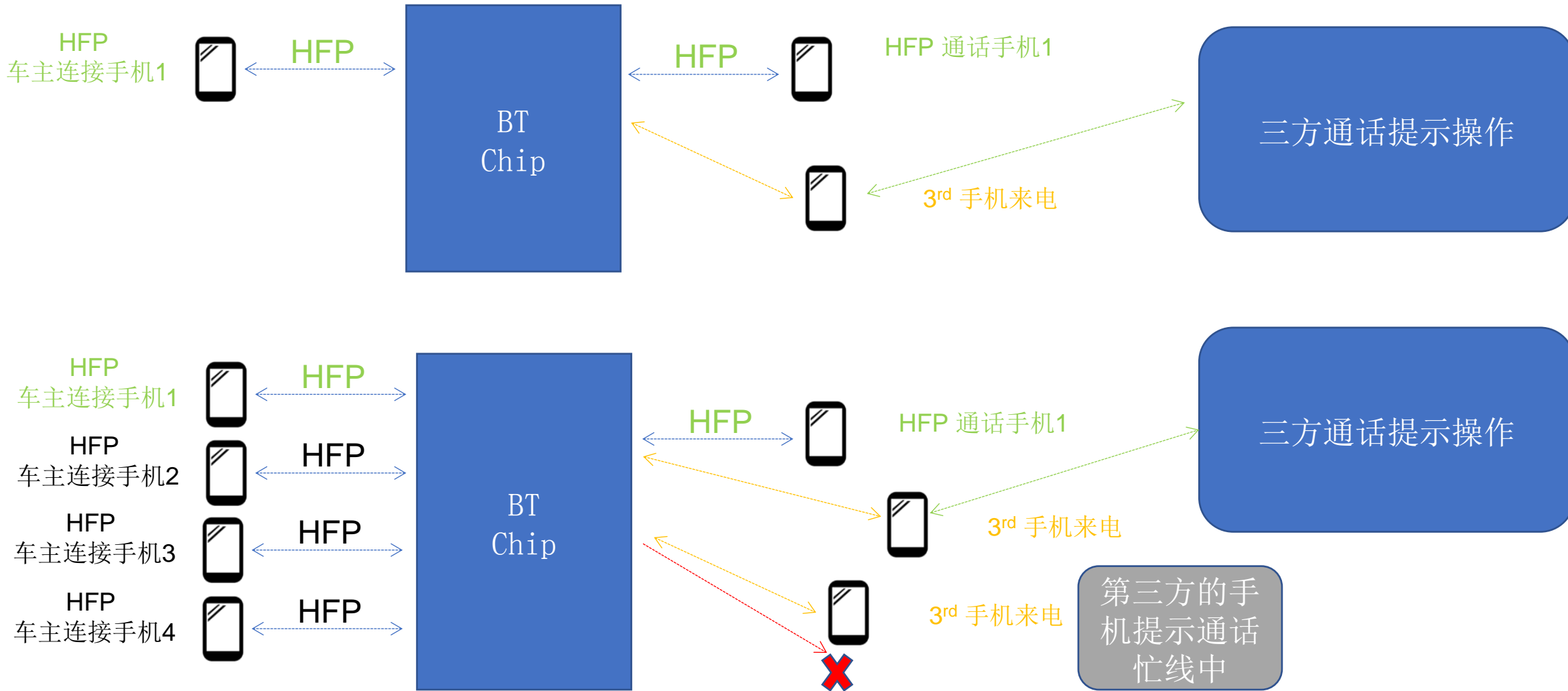


建议:

单个蓝牙连接的时候建议保留三方通话。

多个蓝牙连接考虑系统的复杂度, 建议直接发送拒绝的**AT**指令给第三方来电手机

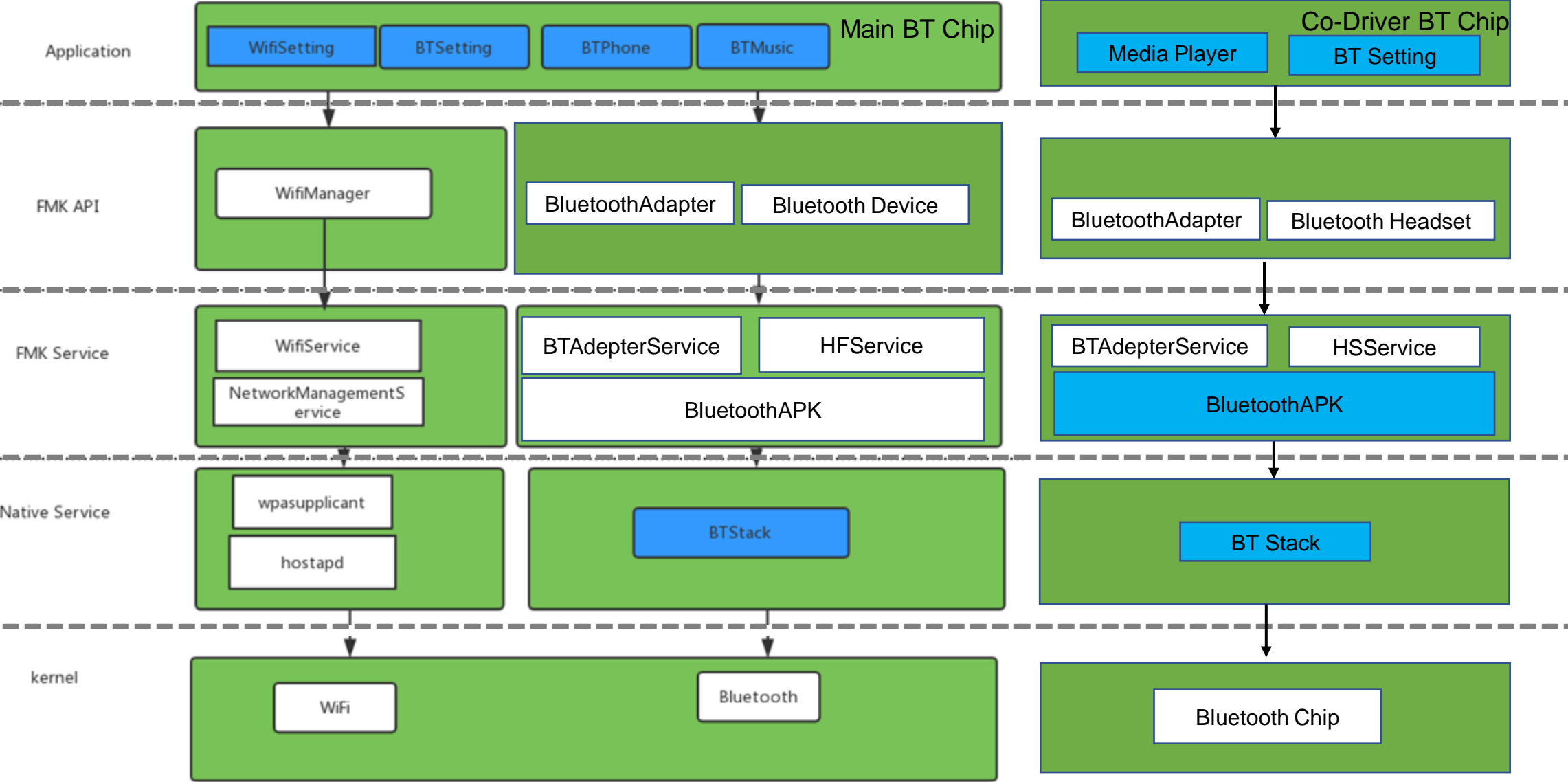
4 HFP Solution (Leo 意见)



Leo建议:

多个HFP 处理连接状态, 只有当前正在通话的电话, 有第三方来电, 界面提示用户有三方通话的请求, 有用户自己选择的处理选项。而其他处于HoldOn 状态手机的第三方来电, 有车机直接发送拒绝的AT指令第三方来电手机。

Ford BT Solution



THANK YOU



Official Website



WeChat public account