

Rayson Bluetooth Module Products Selection Guide:

(1). BT2.1 (BT3.0) Applications (Classic Bluetooth)

(A). Stereo Headset, Stereo Loud Speaker, (w/ or w/o phone call function)

Stereo Transmitter

→ A2DP or A2DP+HFP

(B). Car Kit with echo cancellation, Noise Reduction Headset,

→ HFP with cVc code

(C). Mono headset, Mono Audio Gateway

→ HSP

(D). Data Communication (UART, Serial port,)

→ SPP, DUN

(E). Bluetooth Key board or mouse

→ HID

(F). Basic BT module, no profile software needed

→ HCI

(G). BT4.0 module. (Security Tag, Monitor Health, Remote Control, Low Rate Data comm

(H). BT4.0 (BT3.0+Bluetooth Low Energy) Dual modes module. (Master devices: NB, Pad PC, mobile phone,...)

(2). BT chip set selection

chip set capabilities and performance: CSR8670 > BC5-MM > BC3-MM > BC4

(A).Stereo receiver, Stereo transmitter, A2DP, APTX, True Wireless,	CSR8670 BC5-MM BC3-MM CSR8645 APTX ROM CSR8640 ROM
(B).HFP,Echo cancellation cVc or Noise reduction cVc	CSR8670 BC5-MM BC3-MM CSR8645 APTX ROM CSR8640 ROM
(C).Mono headset, Mono Audio gateway, (D). Data communication (UART, Serial port,) (E). Bluetooth Key board or mouse	BC4 BC5-MM BC3-MM CSR8605
(F).HCI	BC4 HCI ROM version
(G).Dual BT modes (BT3.0 & BT4.0) module for NB, mobile phone or Pad PC	CSR8670 CSR8510 HCI ROM
(H). BT4.0 Low Energy (Healthy, Security, Data Comm, phone alert)	CSR1000 with standard BT4.0 profiles CSR1010 with standard BT4.0 profiles

(3). Rayson BT module products selection

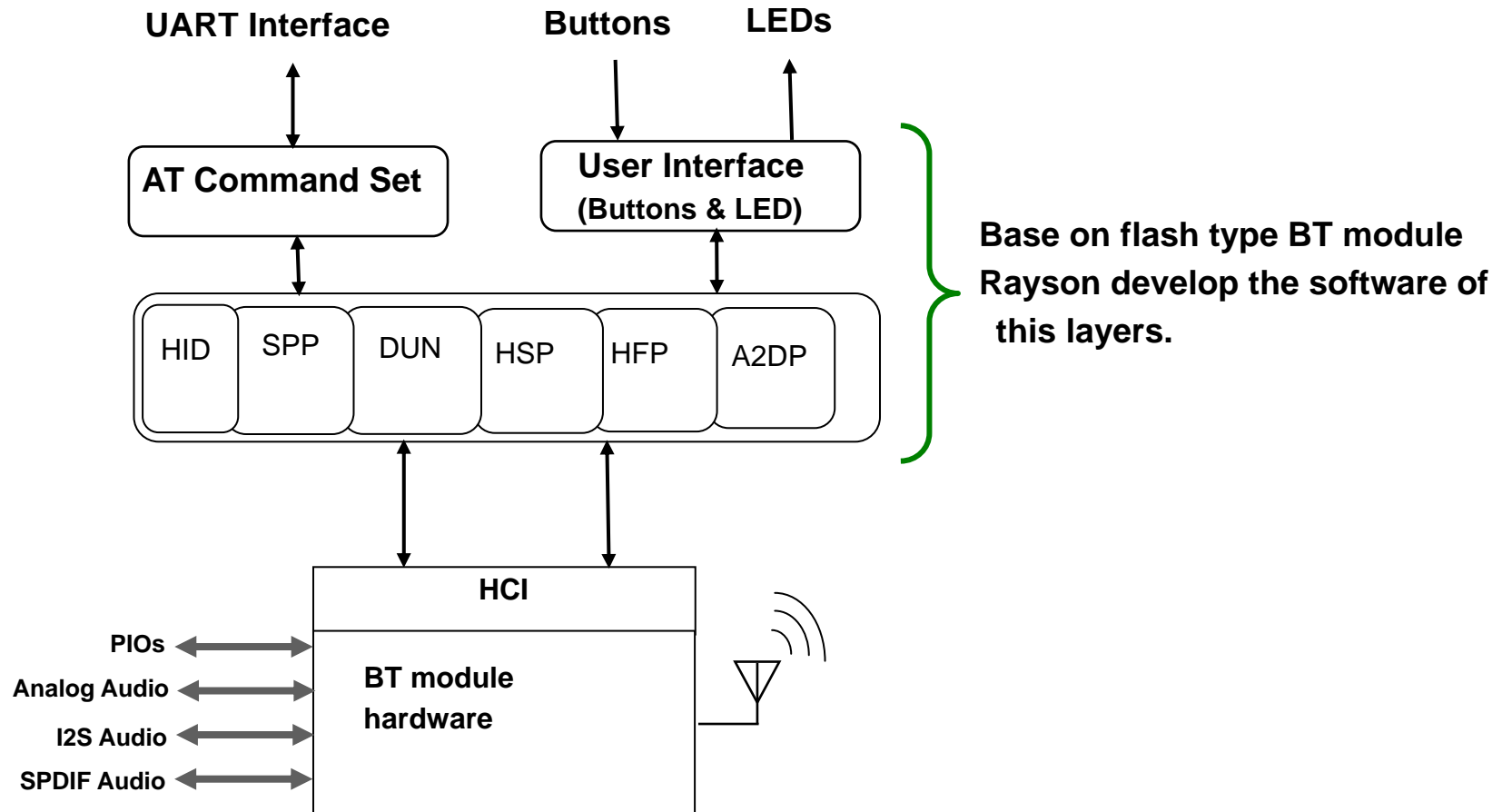
	Class 2 w/o antenna	Class 2 with antenna	Class 1 w/o antenna	Class 1 with antenna
CSR8670	BTM770 BTM866,BTM867	BTM860		
BC5-MM	BTM700 (32M flash, 3.3V) BTM720 (16M flash, 3.3V) BTM740 (BTM730 工規版)	BTM760 (16M flash, 3.3V)	510-6XA (16M flash, 3.3V)	
BC3-MM			BTM240	
CSR6840 ROM	BTM640	BTM641		
CSR6845 APTX ROM	BTM645	BTM646		
BC4	BTM112 BTM162(mini size, 3.3V) BTM172(mini size, 1.8V)	BTM182 (3.3V) BTM192 (1.8V) BTM120 (=BlueGiga WT12)	BTM222	BTM232 (=BlueGiga WT11)
BC4 HCI ROM	BTM331			
CSR8510 HCI ROM	BTM320	BTM300		
CSR1000 BTLE ROM		BTM800, BTM80x (BTM800 with different profiles)		
CSR1010		BTM810 (bigger memory than BTM800)		

Note 1: CSR8670 has included Bluetooth dual mode stack software.

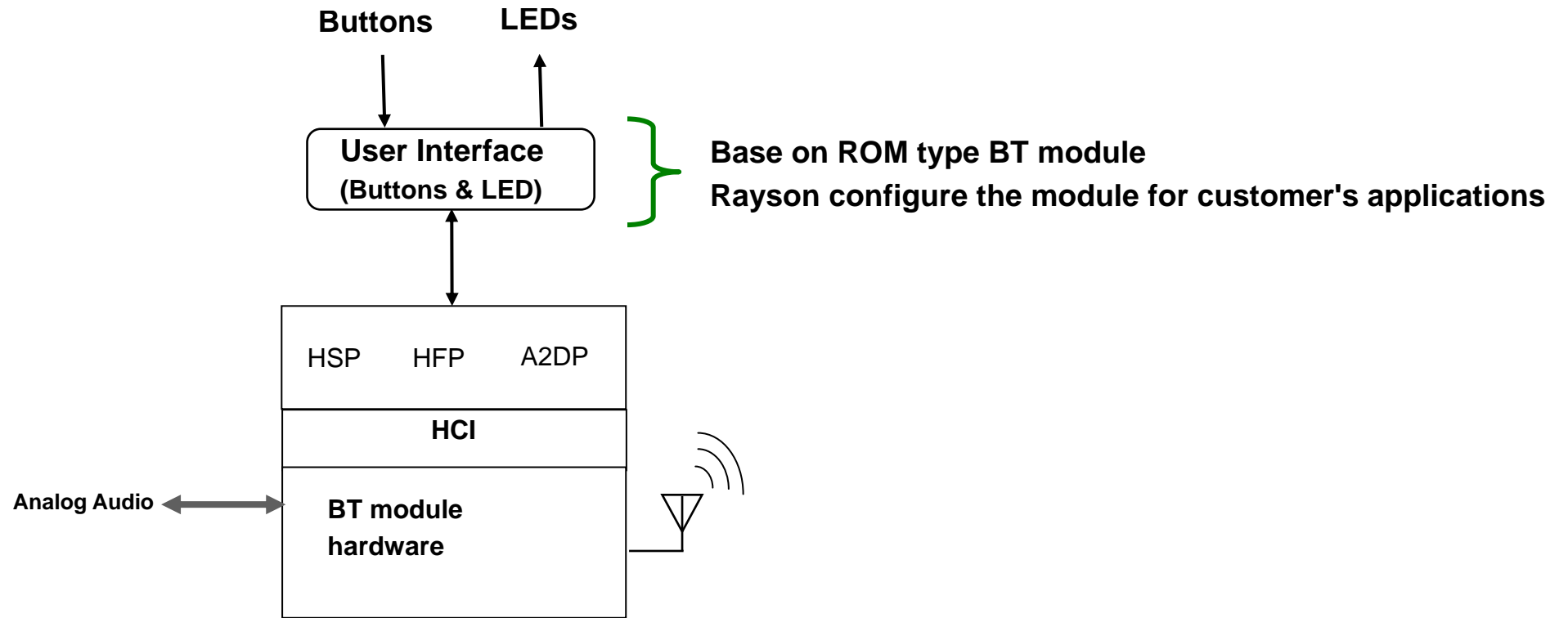
Note 2: CSR8510 have no Bluetooth stack software. It must work with a host processor that handles the Bluetooth stack software.

Bluetooth Firmware Versions Selection Guide:

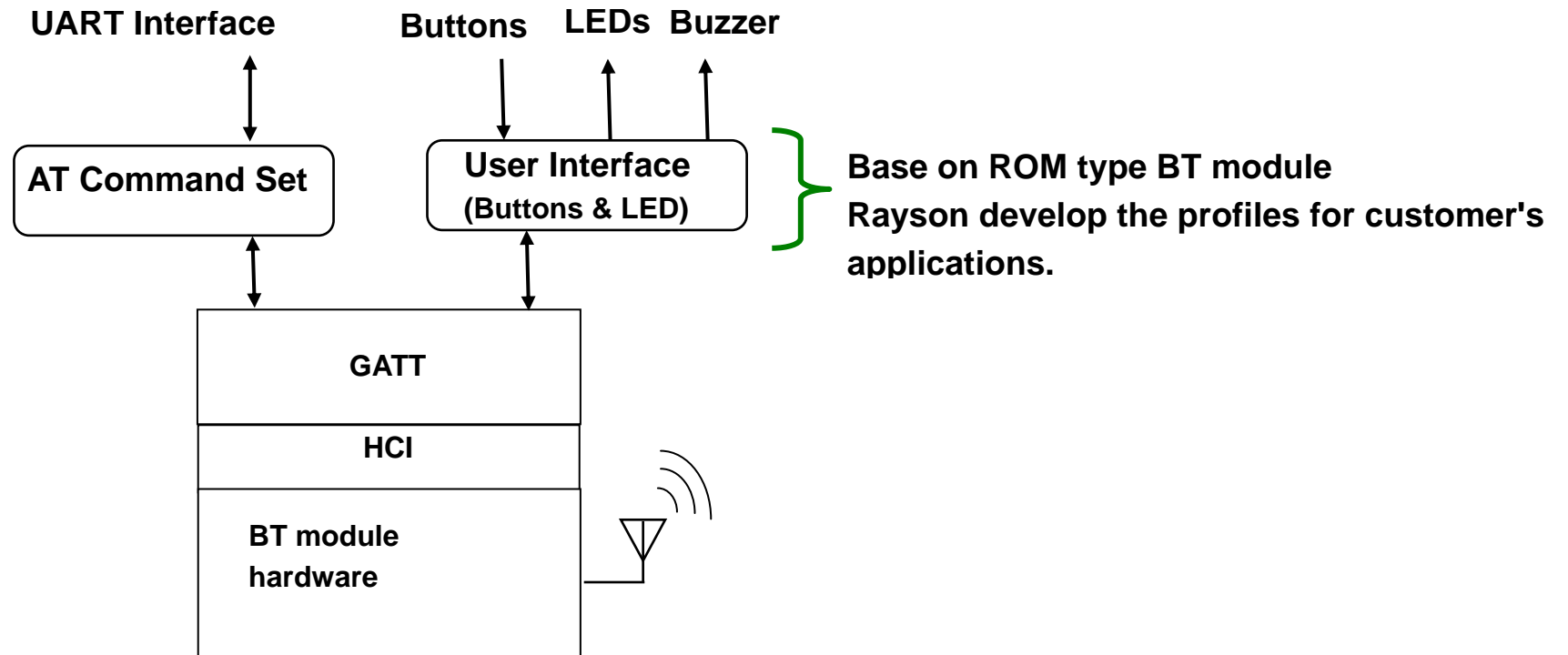
(1) BT3.0 Bluetooth Firmware versions.



(2). Bluetooth 3.0 ROM versions



(3) Bluetooth Low Energy versions



(4) BT3.0 Bluetooth firmware versions selection guide

(a). a20-ATC series, communicate with host by UART AT command. It is based on CSR ADK2.0.

a20-RX-ATC	Analog audio interface, includes A2DP, AVRCP, HFP/HSP AAC can be enabled per customer's request. Audio interface can be changed to I2S or SPDIF as per customer's application
a20-ARX-ATC	Analog audio interface, includes aptX, A2DP, AVRCP, HFP/HSP AAC can be enabled per customer's request. Audio interface can be changed to I2S or SPDIF as per customer's application
a20-SRX-ATC	Analog audio interface, includes SPP, A2DP, AVRCP, HFP/HSP AAC can be enabled per customer's request. Audio interface can be changed to I2S or SPDIF as per customer's application
a20-SARX-ATC	Analog audio interface, includes aptX, SPP, A2DP, AVRCP, HFP/HSP AAC can be enabled per customer's request. Audio interface can be changed to I2S or SPDIF as per customer's application
a20-RM-ATC	Analog audio interface, includes A2DP, AVRCP AAC can be enabled per customer's request. Audio interface can be changed to I2S or SPDIF as per customer's application
a20-ARM-ATC	Analog audio interface, includes aptX, A2DP, AVRCP AAC can be enabled per customer's request. Audio interface can be changed to I2S or SPDIF as per customer's application

(b). HIC series, the user interface are LED and PIOs . It is based on CSR ADK2.0.

RX-HIC	Analog audio interface, includes A2DP, AVRCP, HFP/HSP AAC can be enabled per customer's request. Audio interface can be changed to I2S or SPDIF as per customer's application Battery detection can be disable/enabled as per customer's application
ARX-HIC	Analog audio interface, includes aptX, A2DP, AVRCP, HFP/HSP AAC can be enabled per customer's request. Audio interface can be changed to I2S or SPDIF as per customer's application Battery detection can be disable/enabled as per customer's application
RM-HIC	Analog audio interface, includes A2DP, AVRCP AAC can be enabled per customer's request. Audio interface can be changed to I2S or SPDIF as per customer's application Battery detection can be disable/enabled as per customer's application
ARM-HIC	Analog audio interface, includes aptX, A2DP, AVRCP AAC can be enabled per customer's request. Audio interface can be changed to I2S or SPDIF as per customer's application Battery detection can be disable/enabled as per customer's application

(c). iAP series, communicate with host by UART AT command. It is based on CSR ADK2.0 and include APPLE MFi handler

a20-IARX-ATC	Analog audio interface, 包含 aptX, SPP, iAP, A2DP, AVRCP, HFP/HSP AAC can be enabled per customer's request. Audio interface can be changed to I2S or SPDIF as per customer's application
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(e). SPP series, dedicated for data communication on BC4 module. It is based on CSR Bluelab 4.12

SPP 6.28	It is only support classic SPP communication with AT command set defined by Rayson. This version can not connect with APPLE product.
SPP 6.28i	This version can connect to classic SPP or APPLE product. But it doesn't include the MFi handler. The host processor should handle the MFi authentication process.

(e). HID series, dedicated for HID on BC4 module. It is based on CSR Bluelab 4.12. Including keyboard or mouse applications

HID 2.03	The firmware can be set to keyboard or mouse function by PIO input.
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(4) BT4.0 Bluetooth firmware versions selection guide

communicate with host by UART AT command.

ALT	Phone Alert profile, It can be alerted by incoming call or SMS event. Caller ID can be received from the phone.
HLTH	Healthy profile, It includes the Thermal meter and Heart rate services.
PRX	Proximity profile, It includes the Find me and Proximity services.
LRC	Low Rate Communication, This is Rayson proprietary service. It is similar to SPP but provide very low power consumption and lower data rate.