



**Application Note**  
AN1002-01, 2013-12-26  
SDK API Overview



## Notice

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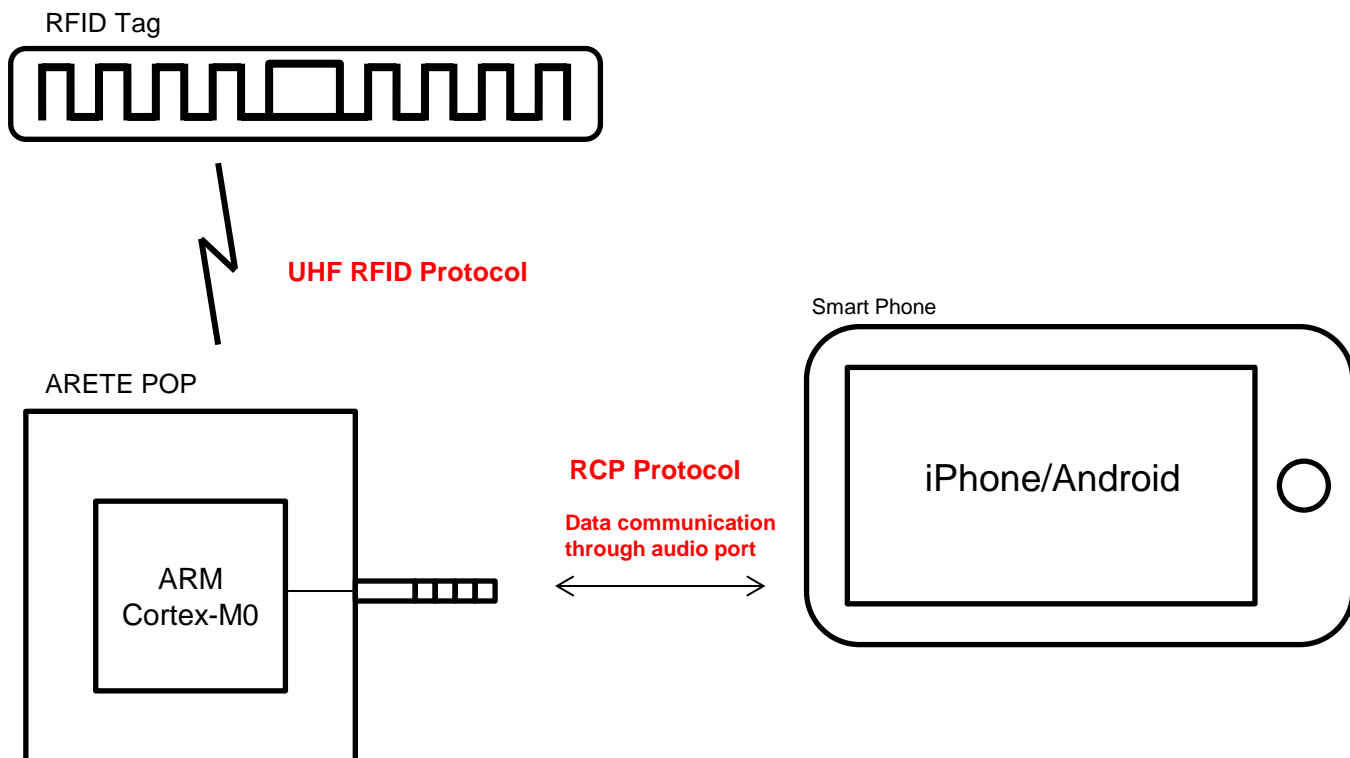
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## Revision History

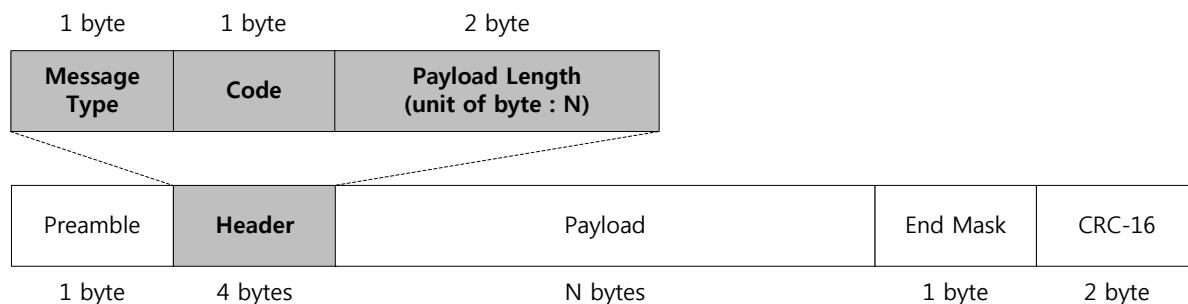
Version	Date	Changes
00	2013-07-23	Initial released
01	2013-12-26	Address changed Revision history added

RCP (Reader Control Protocol) is an interface protocol between a device driver of a smart phone and a RFID interrogator. RCP is not including physical layer format. ARETE POP is using stereo out and microphone input as physical layer.

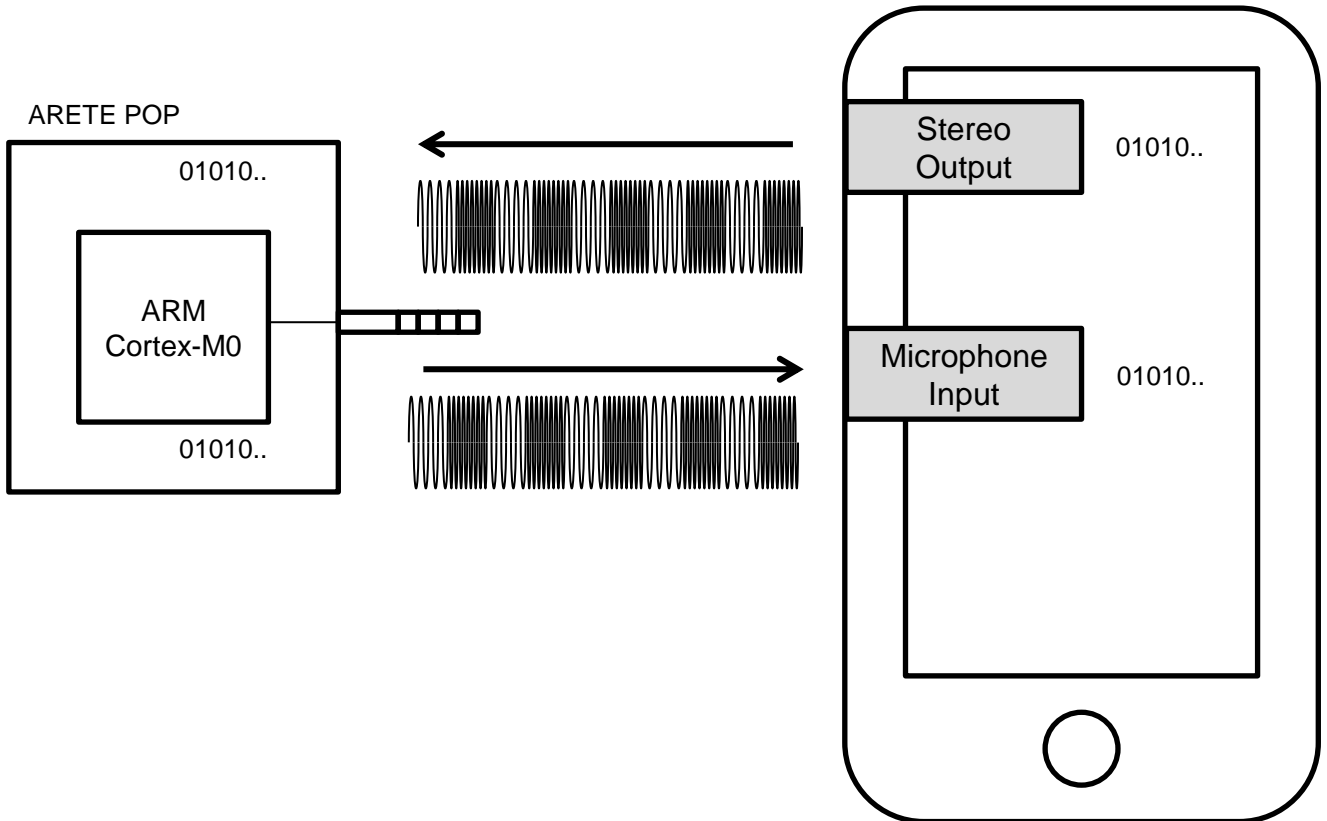


	Standard	Note
UHF RFID Protocol	ISO18000-6C / EPC C1G2	
RCP Protocol	ISO29173-1	Not including physical layer

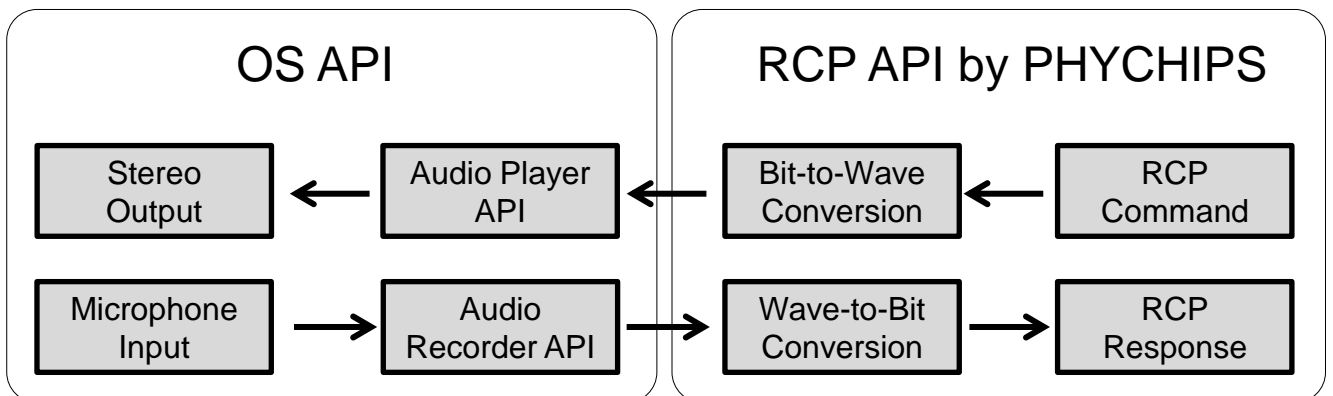
RCP includes types of command/response/notification protocol messages and parameters loaded in payload section.



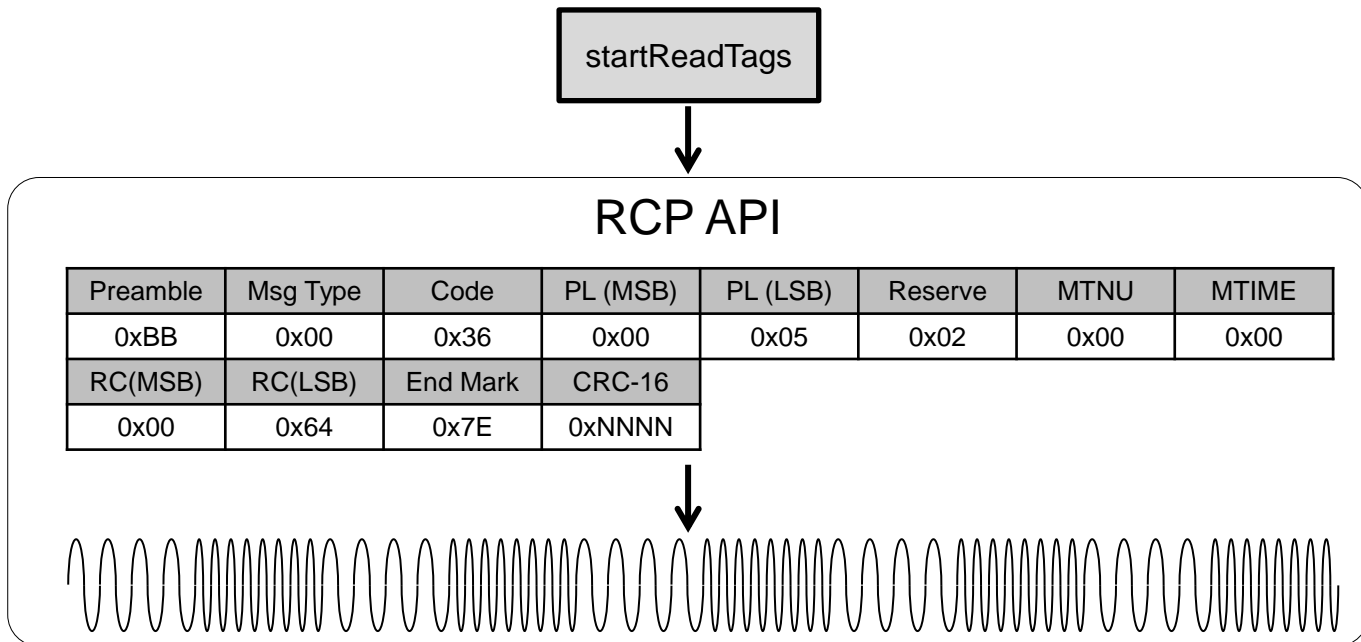
APP is converting binary bit stream to audio wave to transmit data to ARETE POP. This process is using audio player API in OS. ARETE POP is generating audio wave to transmit data to smart phone and APP is using audio recorder API in OS to capture audio wave.



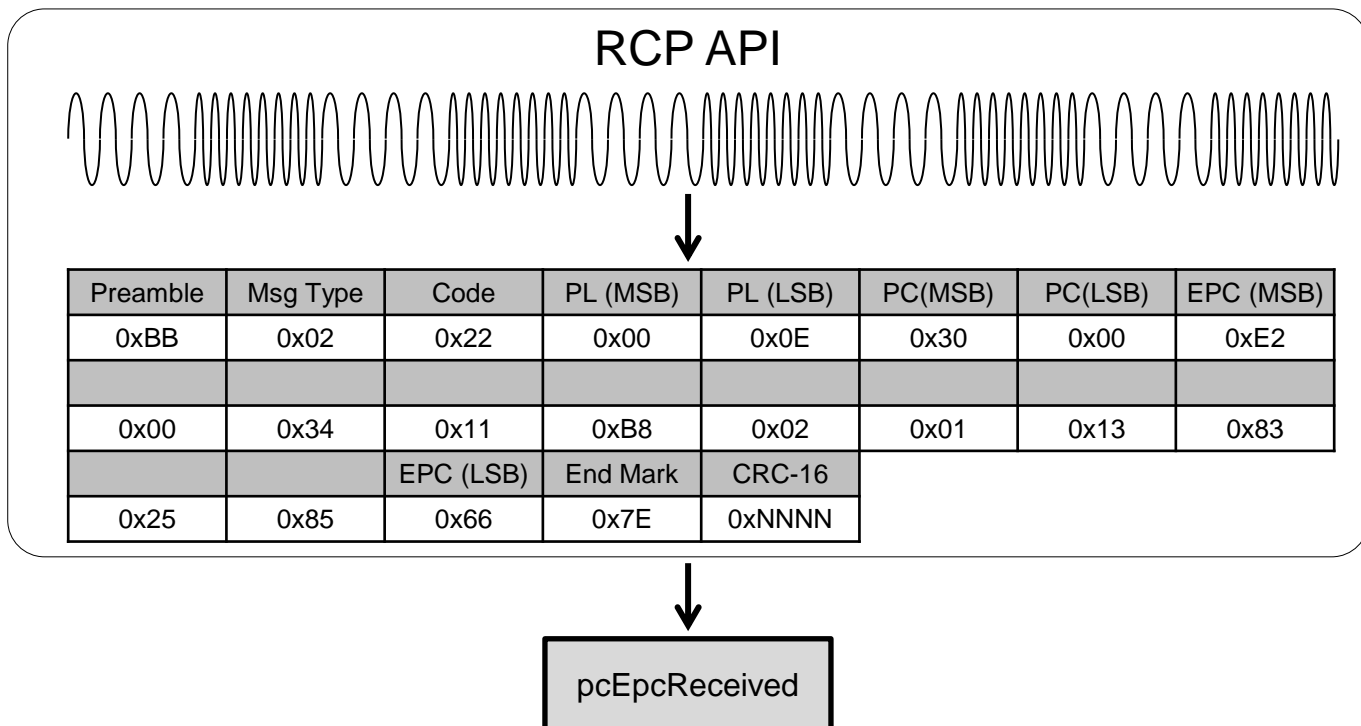
RCP API constructs and deconstructs RCP Packet. Additionally, converting bit-to-wave and vice versa.



For example, to start reading tags, you should call **startReadTags** method. This method is generating RCP packet whose command code is 0x36. Then RCP is converted into wave format.



When ARETE POP read a tag, it will send RCP to the smart phone in form of wave. The smart phone is always watching incoming wave. If RCP is arrived at the smart phone, the smart phone converts it into RCP and then calls call-back method, **pcEpcReceived**. Call-back method is implemented as delegate (at iOS) and interface (Android).



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