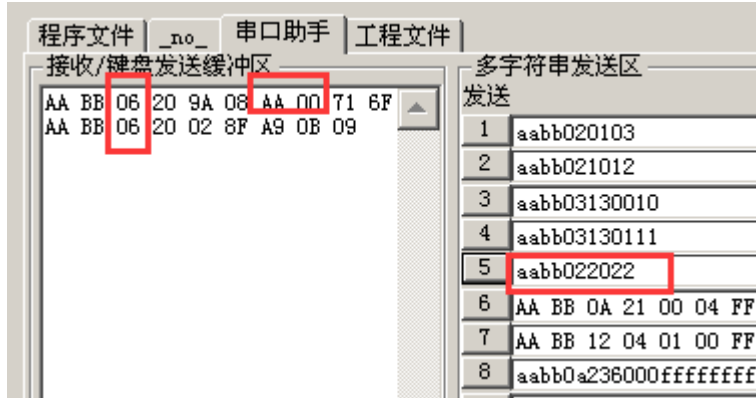


How to deal with UID includes AA

Sample:



Send command to read UID: AABB022022,
First card return: AABB06209A08AA00716F
Second card return: AABB0620028FA90B09

The first card's UID is "9A08AA71", so the RFID reader send response of the command and insert "00" behind the "AA" of the UID, but the length byte is still 06. So, if you find the is "AA" in the data, then remove one byte of "00" next to the "AA". If there are 2 bytes of "00", just remove the first byte of "00". For example, the received data includes "AA0000", then you just need to remove one "00", and save the next "00", finally the result is "AA00".

The second card's UID is "028FA90B", it has no "AA" inside, so it needs not to add "00" behind "AA".

Send command code example:

```
void UartSend(unsigned char *cSendBuffer)
{
    unsigned char i;
    unsigned char cChecksum;
    TXC = 1;
    g_bReceCommandOk = 0;
    UDR = 0xAA;
    while (!TXC);
    TXC = 1;
    UDR = 0xBB;    // send header AABB
```

```

while (!TXC);
cChecksum = 0;
for (i=0; i<cSendBuffer[0]; i++)
{
    cChecksum ^= cSendBuffer[i];
    TXC = 1;
    UDR = cSendBuffer[i];
    while (!TXC);
    if (cSendBuffer[i] == 0xAA)
// if there is a "0xAA" in the data field but not the command header,
// add a "0x00" follow the "0xAA", CL (command length) will not changed.
    {
        TXC = 1;
        UDR = 0;    // insert "00" next to the "AA"
        while (!TXC);
    }
}
TXC = 1;
UDR = cChecksum;    // Send check sum byte
while (!TXC);
TXC = 1;
}

```

Receive code example:

```

// USART Receiver interrupt service routine
interrupt [USART_RXC] void usart_rx_isr(void)
{
    static unsigned char i;
    static unsigned char cReceivedData;
    static unsigned char cChecksum;
    char status;
    status=UCSRA;
    cReceivedData=UDR;

if ((status & (FRAMING_ERROR | PARITY_ERROR | DATA_OVERRUN))==0)
{
    if (g_bReceAA)
    {
        g_bReceAA = 0;
        if (0 != cReceivedData)
        {
            g_cReceNum = 0;
        }
    }
}
}

```

```

else
{
    if (0xAA == cReceivedData)    // get "AA"
    {
        g_bReceAA = 1;
    }
    g_cReceBuf[g_cReceNum++] = cReceivedData;
    if (g_cReceNum > g_cReceBuf[0])
    {
        cCheckSum = 0;
        for (i=0; i <= g_cReceBuf[0]; i++)
        {
            cCheckSum ^= g_cReceBuf[i];
        }
        if (0 == cCheckSum)
    {
        g_bReceCommandOk = 1;    // command success flag set to 1
        RXEN = 0;
    }
    g_bReceAA = 0;
    g_cReceNum = 0;
}
if (g_cReceNum >= sizeof(g_cReceBuf))
{
    g_cReceNum = 0;
    g_bReceAA = 0;
}
}
}
}
}
//-----

```

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Since 2008, focus on RFID technology.
