4to2 matrix communication protocol

mscomm settings: 9600,n,8,1,DTRenable=true

PC receive the matrix system data

byte1	byte2	byte3	byte4	byte5	byte6	byte7	byte8	byte9	byte10	byte11	byte12	byte13	byte14
0x62	mem_a	mem_b	0x1	0x1	src_a	src_b	0x1	0x1	src_status	power_flag	0x1	0x77	checksum

in every data package,the byte1(0x62) is the first receiving byte and the byte14(checksum)is the last receiving byte

checksum=LowByte(byte2+byte3+...+byte12)

byte2(mem_a)				
0x1	0x2	0x4	0x8	mem_a is the channel which output_A switched to when power on.
input1	input2	input3	input4	

byte3(mem_b)				
0x1	0x2	0x4	0x8	mem_b is the channel which output_B switched to when power on
input1	input2	input3	input4	

byte6(src_a)				
0x1	0x2	0x4	0x8	src_a is the channel which output_A is working on currently
input1	input2	input3	input4	

byte7(src_b)				
0x1	0x2	0x4	0x8	src_b is the channel which output_B is working on currently
input1	input2	input3	input4	

byte10(src_status)				
bit4	bit5	bit6	bit7	bit4=1 , input4 is availabe ; bit4=0 , input4 is unavailable ...
input4	input3	input2	input1	bit7=1 , input1 is availabe ; bit7=0 , input7 is unavailable

byte11(power_flag)				
0x0	0x1			power_flag=0 system is standby power_flag=1 system is working
stb	on			

PC send controls to matrix

byte1	byte2	byte3	byte4	
order	~order	0xd5	0x7b	the byte1(order) is the first sending byte and the byte4(0x7b) is the last sending byte ,

order	comments
0x10	if power on then power off, if power off then power on
0x28	store current input channel to memory channel
0x0	output_A switch to input 1
0x1	output_A switch to input 2
0x2	output_A switch to input 3
0x3	output_A switch to input 4
0x4	output_B switch to input 1
0x5	output_B switch to input 2
0x6	output_B switch to input 3
0x7	output_B switch to input 4