Data format of closed - loop board serial port communication protocol

frame header		length	function code	data (H)	data (L)	check sum	frame tail
0xFE	0xFE	xx	xx	xx	xx	xx	0x16

back

{OK} Receive correct back

Checksum = (length + function code + data (H) + data (L)) & 0xff

For example：

Modify Kp:	FE	FE	05	A0	00	28	CD	16
Modify Ki:	FE	FE	05	A1	00	0A	B0	16
Modify Kd:	FE	FE	05	A2	00	C8	6F	16
Read the PID parameters	FE	FE	05	B0	AA	AA	09	16
Read current parameters:	FE	FE	05	B1	AA	AA	0A	16
Read microstep parameters:	FE	FE	05	B2	AA	AA	0B	16

Notes:

1、XX represents variable data, frame head and frame tail are immutable!

2、Data is sent in hexadecimal

3、The function code can be extended in accordance with this communication

Function code data range: 0xA0 -0xBF is the write data range

function

high byte comes first.

4、Hexadecimal letters are not necessarily case sensitive

5、Communication error information:

<1>、Frame header or frame tail receiving error ： "Frame Err!\r\n"

<2>、CRC verify error： "CRC verify err\r\n"

<3>、Data length receiving error: "Data Length err\r\n"

<4>、Function code data out of range error:"Function Code err\r\n"

<5>、Function code not defined error: "Function Code Undefined\r\n"

<6>、Error reading PID parameter information： "Read PID err\r\n"

<7>、Error reading current parameter: "Read Current err\r\n"

<8>、Error reading current microstep parameter: "Read Mmicrostep err\r\n"