1. 握手数据

10.20.2.221:xxxx 5A 03 00 00 00 01 01 01 03 00 00 00 01 01 00 00 01 00 5A A5

10.50.2.7:41185 5A 00 00 00 00 00 00 01 03 00 00 00 01 01 00 01 00 00 59 A5

10.20.2.221:xxxx 5A 03 00 00 00 01 01 01 03 00 00 00 01 01 00 00 01 00 5A A5

10.50.2.8:41186 5A 00 00 00 00 00 00 01 03 00 00 00 01 01 00 00 01 00 59 A5

5A 00 00 00 00 00 00 01 00 00 00 02 01 01 00 00 01 00 58 A5

5A 00 00 00 00 00 00 01 00 00 00 02 01 01 00 00 01 00 58 A5

1. 开始测试

5A 04 00 00 00 01 01 01 04 00 00 00 C0 04 00 00 05 05 FF FF FF FF 9F A5

1. 单项测试

(1).设备ID

(2).错误码：测试次数、误码错误次数、丢包次数、通信中断次数  
(3).类型

**a.串口测试：**先10.50.2.8:41186再10.50.2.7:41185:

**测试通过：**

5A 00 00 00 00 00 00 01 07 00 00 00 B2 00 00 00 54 05 01 02 01 01 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 02 01 02 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 02 01 03 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 02 01 04 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 BA A5

5A 00 00 00 00 00 00 01 07 00 00 00 B2 00 00 54 00 05 01 01 01 01 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 01 02 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 01 03 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 01 04 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 BA A5

5A 00 00 00 00 00 00 01 00 00 00 03 B2 00 00 00 D2 05 01 01 01 01 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 01 02 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 01 03 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 01 04 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 02 01 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 02 02 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 03 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 03 02 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 04 01 13 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 25 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 38 A5

**5a:00:00:00:00:00:00:01:00:00:00:0e:b2:00:00:00:d2:05:01:07:01:01:04:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:05:01:07:01:02:04:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:05:01:07:01:03:04:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:05:01:07:01:04:04:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:05:01:07:02:01:04:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:05:01:07:02:02:03:00:00:00:00:00:00:00:04:00:00:00:00:00:00:00:05:01:07:03:01:04:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:05:01:07:03:02:04:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:05:01:07:04:01:53:01:00:00:00:00:00:00:00:00:00:00:00:00:00:00:05:01:07:25:01:04:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:22:a5**

**最后两包数据：**

5A 00 00 00 00 00 00 01 07 00 00 00 B2 00 00 00 54 05 01 02 01 01 20 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 02 01 02 20 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 02 01 03 20 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 02 01 04 20 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 BE A5

5A 00 00 00 00 00 00 01 07 00 00 00 B2 00 00 54 00 05 01 01 01 01 1B 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 01 02 1B 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 01 03 1B 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 01 04 1B 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 BE A5

**测试失败：**

5A 00 00 00 00 00 00 01 01 00 00 00 B2 00 00 54 00 05 01 01 01 01 1D 00 00 00 00 00 00 00 00 00 00 00 05 00 00 00 05 01 01 01 02 1D 00 00 00 00 00 00 00 00 00 00 00 05 00 00 00 05 01 01 01 03 1D 00 00 00 00 00 00 00 00 00 00 00 05 00 00 00 05 01 01 01 04 1D 00 00 00 00 00 00 00 00 00 00 00 05 00 00 00 B8 A5

5A 00 00 00 00 00 00 01 01 00 00 00 B2 00 00 54 00 05 01 01 01 01 1E 00 00 00 00 00 00 00 00 00 00 00 06 00 00 00 05 01 01 01 02 1E 00 00 00 00 00 00 00 00 00 00 00 06 00 00 00 05 01 01 01 03 1E 00 00 00 00 00 00 00 00 00 00 00 06 00 00 00 05 01 01 01 04 1E 00 00 00 00 00 00 00 00 00 00 00 06 00 00 00 B8 A5

5A 00 00 00 00 00 00 01 02 00 00 00 B2 00 00 54 00 05 01 01 01 01 46 00 00 00 00 00 00 00 00 00 00 00 34 00 00 00 05 01 01 01 02 46 00 00 00 00 00 00 00 00 00 00 00 34 00 00 00 05 01 01 01 03 46 00 00 00 00 00 00 00 00 00 00 00 34 00 00 00 05 01 01 01 04 46 00 00 00 00 00 00 00 00 00 00 00 34 00 00 00 BB A5

5A 00 00 00 00 00 00 01 02 00 00 00 B2 00 00 54 00 05 01 01 01 01 93 00 00 00 00 00 00 00 00 00 00 00 81 00 00 00 05 01 01 01 02 93 00 00 00 00 00 00 00 00 00 00 00 81 00 00 00 05 01 01 01 03 93 00 00 00 00 00 00 00 00 00 00 00 81 00 00 00 05 01 01 01 04 92 00 00 00 00 00 00 00 00 00 00 00 80 00 00 00 BB A5

**b.网口测试**

**开始测试：**

5A 09 00 00 00 01 01 01 09 00 00 00 C0 01 00 00 05 05 01 01 02 FF 67 A5

5A 09 00 00 00 01 01 01 09 00 00 00 C0 01 00 00 05 05 01 02 02 FF 64 A5

接收数据：先7后8

**测试通过：**

5A 00 00 00 00 00 00 01 09 00 00 00 B2 00 00 2A 00 05 01 01 02 01 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 02 02 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 C9 A5

5A 00 00 00 00 00 00 01 09 00 00 00 B2 00 00 00 2A 05 01 02 02 01 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 02 02 02 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 C9 A5

5A 00 00 00 00 00 00 01 09 00 00 00 B2 00 00 2A 00 05 01 01 02 01 0F 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 02 02 0F 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 C9 A5

5A 00 00 00 00 00 00 01 09 00 00 00 B2 00 00 00 2A 05 01 02 02 01 0D 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 02 02 02 0D 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 C9 A5

**测试失败：**

**C.内存单元**

**开始测试：**

**5A 01 00 00 00 01 01 01 01 00 00 00 C0 01 00 00 05 05 01 01 25 FF 40 A5**

**5A 01 00 00 00 01 01 01 01 00 00 00 C0 01 00 00 05 05 01 02 25 FF 43 A5**

5A 00 00 00 00 00 00 01 01 00 00 00 B2 00 00 15 00 05 01 01 25 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 F4 A5

5A 00 00 00 00 00 00 01 01 00 00 00 B2 00 00 00 15 05 01 02 25 01 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 F5 A5

(4).停止测试

5A 08 00 00 00 01 01 01 08 00 00 00 C1 01 00 00 05 05 01 01 FF FF 9B A5

5A 08 00 00 00 01 01 01 08 00 00 00 C1 01 00 00 05 05 01 02 FF FF 98 A5

5A 00 00 00 03 01 01 01 00 00 00 03 B6 01 00 00 05 05 01 01 FF FF EC A5

问题汇总：

1.数据格式不正确，CPUPD1和VCOM数据长度字段不一致

2.状态码字段不正确（不管正确还是失败都是显示00，应该是正确0X01错误0X02）

1. **综合测试**

**开始握手：**

5A 00 00 00 00 00 00 01 01 00 00 00 01 01 00 01 00 00 5B A5

**开始测试：**

5A 06 00 00 00 01 01 01 06 00 00 00 C0 04 00 00 05 05 FF FF FF FF 9F A5

5A 06 00 00 00 01 01 01 06 00 00 00 C0 04 00 00 05 05 FF FF FF FF 9F A5

**停止测试：**

5A 07 00 00 00 01 01 01 07 00 00 00 C1 04 00 00 05 05 FF FF FF FF 9E A5

5A 07 00 00 00 01 01 01 07 00 00 00 C1 04 00 00 05 05 FF FF FF FF 9E A5

(1).6个字节机笼板卡等信息:机笼(1)+槽道(1)+板卡(1)+小周期(1)+灯位(2)

板卡：01-VIB16 /02-VOB16

(2).错误码  
(3).类型

(4).错误次数：

5A 00 04 00 00 00 00 01 00 00 00 00 B3 00 02 86 00 02 04 02 01 00 04 A8 5A 14 B9 EB 50 DD BB BC 6F B6 07 40 CD E8 05 17 F2 83 B9 3E 9C C7 04 69 A3 AC B8 95 01 F2 BA AE DD 75 94 F9 E2 1E 28 05 40 40 2A 52 7F 2B 96 7B 11 6F 2B 2C 2E 04 97 D0 8C 5A 95 87 B3 31 29 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 20 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 62 A5

VPS故障：

5A 00 04 00 00 00 00 01 02 00 00 00 B5 00 00 06 00 05 01 12 FF FF 01 EA A5

跑马灯：

？有输出和无输出怎么判断？ 帧协议第1-2字节

02 04 02 03 01 00 :机笼(1)+槽道(1)+板卡(1)+小周期(1)+灯位(2)

板卡：01-VIB16 /02-VOB16

机笼2 槽道4 板卡VOB16 小周期2+1 灯位9？

5A 00 04 00 00 00 00 01 00 00 00 00 B3 00 02 86 00 02 04 02 02 00 04 3A 1D DB D7 0A DA 90 D2 45 74 B8 4C 2E 8D A4 1D 61 23 8C 83 98 F1 0A B5 D7 5F 22 2B BC A6 3E 7A 54 00 58 B4 1B AE 70 2A 70 57 6C 7B 3F F9 44 E5 C6 2B C2 D3 89 85 EA 4D E2 7C F6 1C AD D2 DE 82 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 21 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 75 A5

5A 00 08 00 00 00 00 01 00 00 00 00 B3 00 02 86 00 02 08 01 00 00 08 FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF 09 00 00 00 08 00 00 00 08 00 00 00 08 00 00 00 08 00 00 00 08 00 00 00 08 00 00 00 08 00 00 00 08 00 00 00 08 00 00 00 08 00 00 00 08 00 00 00 04 00 00 00 04 00 00 00 04 00 00 00 04 00 00 00 60 A5

5A 00 04 00 00 00 00 01 00 00 00 00 B3 00 02 86 00 02 04 02 04 00 04 3A 1D DB D7 0A DA 90 D2 45 74 B8 4C 2E 8D A4 1D 61 23 8C 83 98 F1 0A B5 D7 5F 22 2B BC A6 3E 7A 54 00 58 B4 1B AE 70 2A 70 57 6C 7B 3F F9 44 E5 C6 2B C2 D3 89 85 EA 4D E2 7C F6 1C AD D2 DE 82 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 23 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 75 A5

5A 00 08 00 00 00 00 01 00 00 00 00 B3 00 02 86 00 02 04 02 07 00 08 A8 5A 14 B9 EB 50 DD BB BC 6F B6 07 40 CD E8 05 17 F2 83 B9 3E 9C C7 04 69 A3 AC B8 95 01 F2 BA AE DD 75 94 F9 E2 1E 28 05 40 40 2A 52 7F 2B 96 7B 11 6F 2B 2C 2E 04 97 D0 8C 5A 95 87 B3 31 29 50 00 00 00 50 00 00 00 50 00 00 00 50 00 00 00 50 00 00 00 50 00 00 00 50 00 00 00 50 00 00 00 50 00 00 00 50 00 00 00 50 00 00 00 4E 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 51 A5

5A 00 08 00 00 00 00 01 00 00 00 00 B3 00 02 86 00 02 04 02 05 00 08 A8 5A 14 B9 EB 50 DD BB BC 6F B6 07 40 CD E8 05 17 F2 83 B9 3E 9C C7 04 69 A3 AC B8 95 01 F2 BA AE DD 75 94 F9 E2 1E 28 05 40 40 2A 52 7F 2B 96 7B 11 6F 2B 2C 2E 04 97 D0 8C 5A 95 87 B3 31 29 50 00 00 00 50 00 00 00 50 00 00 00 50 00 00 00 50 00 00 00 50 00 00 00 50 00 00 00 50 00 00 00 50 00 00 00 50 00 00 00 50 00 00 00 4C 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 28 00 00 00 55 A5

5A 00 01 00 00 00 00 01 00 00 00 00 B3 00 02 86 00 01 04 02 08 FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF 95 02 00 00 95 02 00 00 95 02 00 00 95 02 00 00 95 02 00 00 95 02 00 00 95 02 00 00 95 02 00 00 95 02 00 00 95 02 00 00 95 02 00 00 95 02 00 00 95 02 00 00 95 02 00 00 95 02 00 00 95 02 00 00 6D A5

**板卡插拔情况：**

Appdata[1] =02 机笼1槽道4 VOB16

Appdata[4]=01机笼1 槽道7 VIB16

Appdata[5]=01机笼1 槽道8 VIB16

Appdata[13]=02机笼2 槽道4 VOB16

Appdata[17]=01机笼2 槽道8 VIB16

5A 00 40 00 00 00 00 01 00 00 00 00 B0 01 00 30 00 00 02 00 00 01 01 00 00 00 00 00 00 00 02 00 00 00 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 9B A5

5A 01 00 00 00 00 00 01 00 00 00 00 B0 01 00 30 00 00 00 00 00 01 01 00 00 00 00 00 00 00 02 00 00 00 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 D8 A5 (机笼1槽道4 VOB16错误或者没有插板卡，停止测试)

5A 00 40 00 00 00 00 01 00 00 00 00 B0 01 00 30 00 00 02 00 00 01 01 00 00 00 00 00 00 00 02 00 00 00 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 9B A5

**CPUPD1/VCOM：**

5A 00 40 00 00 00 00 01 00 00 00 03 B2 00 00 D2 00 05 01 01 01 01 3C 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 01 02 3C 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 01 03 3C 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 01 04 3C 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 02 01 3C 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 02 02 3B 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 03 01 3B 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 03 02 3B 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 04 01 4F 02 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 25 01 3B 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 08 A5

5A 08 00 00 00 00 00 01 00 00 00 0F B2 00 00 D2 00 05 01 01 01 01 50 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 01 02 50 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 01 03 50 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 01 04 50 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 02 01 4F 00 00 00 00 00 00 00 01 00 00 00 00 00 00 00 05 01 01 02 02 4F 00 00 00 00 00 00 00 01 00 00 00 00 00 00 00 05 01 01 03 01 4F 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 03 02 4F 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 04 01 15 03 00 00 00 00 00 00 00 00 00 00 00 00 00 00 05 01 01 25 01 4F 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 BE A5

1. **系统自检**

**开始自检：**

5A 02 00 00 00 01 01 01 02 00 00 00 C0 04 00 00 05 05 01 01 FF FF 9F A5

5A 02 00 00 00 01 01 01 02 00 00 00 C0 04 00 00 05 05 01 02 FF FF 9C A5

**停止自检：**

5A 03 00 00 00 01 01 01 03 00 00 00 C1 04 00 00 05 05 FF FF FF FF 9E A5

5A 03 00 00 00 01 01 01 03 00 00 00 C1 04 00 00 05 05 FF FF FF FF 9E A5