# IC串口协议

PC端:

1. 写寄存器

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 帧头 | 命令类型 | 寄存器类型 | 寄存器地址 | 写入数据 | 读出数据 | CRC8校验 | 帧尾 |
| 0x5a | 0x01 | 1byte | 32bit | 32bit | 0 | 8bit | 0xa5 |

1. 读寄存器

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 帧头 | 命令类型 | 寄存器类型 | 寄存器地址 | 写入数据 | 读出数据 | CRC8校验 | 帧尾 |
| 0x5a | 0x02 | 1byte | 32bit | 0 | 32bit | 8bit | 0xa5 |

3. 导入模板

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 帧头 | 命令类型 | 模板索引 | 模板长度 | 模板数据包编号 | 模板数据 | 帧尾 |
| 0x5a | 0x03 | 2byte | 2byte | 1byte | 1K byte | 0xa5 |

4. 导出模板

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 帧头 | 命令类型 | 模板索引 | 模板长度 | 帧尾 |
| 0x5a | 0x04 | 2byte | 2byte | 0xa5 |

5.导出图片

|  |  |  |  |
| --- | --- | --- | --- |
| 帧头 | 命令类型 | 图片长度 | 帧尾 |
| 0x5a | 0x05 | 4byte | 0xa5 |

1. 导入图片

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 帧头 | 命令类型 | 图片数据包编号 | 图片数据包长度 | 图片包数据 | 帧尾 |
| 0x5a | 0x06 | 2byte | 2byte | 1K byte | 0xa5 |

IC端：

1. 回应写寄存器操作

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 帧头 | 命令类型 | 寄存器类型 | 寄存器地址 | 写入数据 | 读出数据 | CRC8校验 | 帧尾 |
| 0x5a | 0x01 | 1byte | 32bit | 32bit | 0 | 8bit | 0xa5 |

1. 回应读寄存器操作

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 帧头 | 命令类型 | 寄存器类型 | 寄存器地址 | 写入数据 | 读出数据 | CRC8校验 | 帧尾 |
| 0x5a | 0x02 | 1byte | 32bit | 0 | 32bit | 8bit | 0xa5 |

1. 回应导入模板

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 帧头 | 命令类型 | 模板索引 | 模板长度 | 帧尾 |
| 0x5a | 0x03 | 2byte | 0 | 0xa5 |

1. 回应导出模板

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 帧头 | 命令类型 | 模板索引 | 模板长度 | 模板数据 | 帧尾 |
| 0x5a | 0x04 | 2byte | 2byte | 8K byte | 0xa5 |

1. 回应导出图片

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 帧头 | 命令类型 | 模板长度 | 模板数据 | 帧尾 |
| 0x5a | 0x05 | 4byte | 576K byte | 0xa5 |

6.回应导入图片

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 帧头 | 命令类型 | 图片数据包编号 | 图片数据包长度 | 帧尾 |
| 0x5a | 0x06 | 2byte | 2byte | 0xa5 |

7．

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 帧头 | CRC Error(3Byte) | | | CRC8校验 | 帧尾 |
| 0x5a | 0xFF | 0xFF | 0xFF | 8bit | 0xa5 |