Command format

|  |  |  |  |
| --- | --- | --- | --- |
| Command bytes | explanation | Return bytes | Comment |
| 1 | Command |  |  |
| 1,0,FF,FF,FF,FF | Turn off | 1,0,1 (success) |  |
|  |  | 1,0,0 (failure) |  |
| 1,1,FF,FF,FF,FF | Turn on to Bus Monitor Mode | 1,1,1 (success) |  |
|  |  | 1,1,0 (failure) |  |
| 1,2,FF,FF,FF,FF | Turn on to Load Dispatch Mode | 1,2,1 (success) |  |
|  |  | 1,2,0 (failure) |  |
| 2 | Adjust parameters |  | Two bytes are used to store one parameter. If the highest bit is 1 indicates the value is a negative number. The real value is -((H-128)\*256+L) |
| 2,1,VdcH,VdcL,IqH,IqL | Adjust Bus Monitor Mode parameters | 2,1,1 (success) |
|  |  | 2,1,0 (failure) |
| 2,2,IdH,IdL,IqH,iqL | Adjust Load Dispatch Mode parameters | 2,2,1 (success) |
|  |  | 2,2,0 (failure) |
| 3,1,FF,FF,FF,FF | query | 3,array of return value (successful) | Two bytes are used to store one return value. If the highest bit is 1 indicates the value is a negative number. The real value is -((H-128)\*256+L) |
|  |  | 3,0 (failure) |  |
|  |  |  |  |

Return Array: on/off{0,1}, mode{1,2}, VdcH, VdcL, fH, fL, PH, PL, QH, QL, IaH, IaL, IbH, IbL, IcH, IcL, VaH, VaL, VbH, VbL, VcH, VcL

Voltage: 0.1\*(VH, VL)

Current: 0.01\*(IH, IL)

Power: 0.1\*(PH, PL)

Frequency: 0.01\*(fH,fL)

Return bytes from DSP are either 4 or 24 bytes.

Add one List (listRxBuffer) to store returned query result.

Timer interval for command list checking is 500 ms. Whenever this is a command in the list, it will be send out throuth serial port.

Timer interval for automatic status checking is 1000 ms. The query command will be added into the end of command list.

Any command except automatic query command will be insert in front of the first automatic query commands.

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