Multi-function card MF630 central control instruction

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1. For the control function of the multi-function card, adopt custom AT instruction to communicate, and apply USB to serial port connection.

2. AT commands are all in ASCII format, which can be directly input using serial debugging assistant.

3. Custom AT instruction format: AT + command = parameter #, followed by # to indicate the end mark, all characters are uppercase, lowercase is not supported; no spaces are left between characters;Note: For convenience of explanation, # is omitted.

4. When the central controller sends the AT command to the multi-function card, the multi-function card will enter the central control control mode. In this mode, the power management function of the upper computer is no longer effective; when the central control sends an EXIT command, the multi-function card will exit the central control Mode, or automatically exit the next day after the detection time.

5. AT instruction definition

   Set relay instructions:

   (1) Set single relay: AT + CHx = x

      The first x represents the number of relays, ranging from 1 to 8; the second x represents the relay setting variables, '0' represents the open relay, and '1' represents the closed relay, other values　　are invalid.

      For example, sending the command AT + CH1 = 1 means that the first relay is set to close, and the others are the same.

   Multi-function card returns:

      Set successfully: AT + CHx = OK

      Setting failed: AT_CHx = ERROR

   (2) Read the status of a single relay: AT + CHx =?

      Read the current status of the xth relay

   Multi-function card returns:

AT + CHx = 1: The x-th relay is closed

AT + CHx = 0: The xth relay is open

(3) (3) Set multiple relays: AT + CHA = x, x, x, x, x, x, x, x

This instruction can set 8 relays at the same time, the first x means the first relay; x means the relay setting variable, '0' means open the relay, '1' means close the relay, and '/' means do not operate the relay Other values are invalid.

For example, if you need to set the 1st and 2nd relays to close, and the 5th and 6th relays to open, you need to send the command "AT + CHA = 1,1, /, /, 0,0, /, / #"

Multi-function card returns:

Set up successfully:AT+CHA=OK

Setup failed:AT_CHA=ERROR

(4) Read the status of multiple relays：AT+CHA=?

This instruction can read the status value of 8 relays at the same time

Multifunctional card return：AT+CHA=x,x,x,x,x,x,x,x

x value is 0 or 1, 0 means the relay is open, 1 means the relay is closed

Exit Central Control Mode: AT + EXIT

Send this command, the multi-function card can exit the central control mode.