Functional Overview

The expansion card is according to the actual needs of users; is mainly used to increase host's extra functions, so as to achieve the user's personal needs.

CR-AD005 analog card is used for CR-PGM Ⅲprogrammable control host's function expansion; it allows CR-PGM Ⅲ host to increase reading actual sensor voltage value.

Application Characteristics

◆ Input: 8 high impedance input;

◆ Output: 3 DC output;

◆ A.D conversion: A.D converter function can be used for sampling; 10 AD sampling precision;

◆ The range of test voltage: 0 V to +5 V;

◆ The maximum input voltage : +12 volts DC.

External Reference Input

◆ Max input sampling voltage value is +12 volts DC;

◆ The over voltage is +12 volts DC.

Operation Methods

◆ Reads the input voltage (A/D converter)
CR-PGM Ⅲhost send instruction of reading certain road to analog card, after receiving the instruction, analog card will feedback the actual voltage to the CR-PGM Ⅲhost.

◆Following are the programming function description of CR-PGM Ⅲ when use analog card

SEND_QACAR

Void SEND_QACAR (String dev,int channel)
Function: send the request of analog card voltage value, after sending the request, will trigger the analog card DataEVENT events, where they can get the voltage value, specific examples to see the BYTES_TO_INT Parameters of other functions.

Dev - : Analog device

Channel - : Equipment channel number

Example: Acar_m = M:8:ACAR; // Define host board No. 8 analog card
SEND_QACAR (Acar_m,1); // read the first voltage value of Acar_m

BYTES_TO_INT

Int BYTES_TO_INT (byte[] b)
Function: process the first 4 bytes of byte array as an int number, if B is less than 4 bytes, convert according to its real bytes, big endian mode.

Returns:

Return to the converted int number.

Example: Example: analog card voltage returns, the actual voltage of analog card = return voltage (mV)

```
DATA_EVENT(mcar,2)
  {

        ONDATA()
        {
                double voltage =
BYTES_TO_INT(DATA.Data) // When using
SEND_QACAR transmit request, here the trigger.

SEND_COM(COM,1,DOUBLE_TO_STRING(voltage));
        }
  }
```