

Communication Protocol between UART8 and the Controller

Ver:02

Network communication protocol of UART8	Baud Rate: 38400 9N1		
	Communication Mode: RS 485 half duplex		
	Controller to dependent machine(UART8)	Controller gives out reset instruction:	FF 02 03 00
		The instruction about the Controller inquires the model number of the network equipment:	FF 02 03 01 ID 00
		Controller delivers message to UART8:(send out the data by UART8)	<p><u>ID Data Length (Byte) Passage (Byte) Baud rate(Byte) Data.</u></p> <p style="text-align: center;">Refer to the following data definition form</p> <p style="text-align: center;">ID is 0x03 Hex~ 0xFE Hex (9N1)</p>
		No message from the Controller to UART8:(free):	ID 00
	Dependent machine (UART8) to Controller:	The return model of UART8:	<p>02 09 05 00 00 43 4C 43 49 2D 38</p> <p style="text-align: center;">Concrete model, for example ,the above one is CLCI-8 Instruction</p> <p style="text-align: center;">0x09 is the length of the instruction, refers to the number of the bytes afterwards.</p> <p style="text-align: center;">0x02 is the instruction</p>
		Power controller has some message to Controller: (When the data mode delivered by Controller has some mistakes or the receiving buffer area was covered.)	<p>02 01 'E'</p> <p style="text-align: center;">E: Error</p> <p style="text-align: center;">0x01 is the length of the instruction</p> <p style="text-align: center;">0x02 is the instruction</p>
		No message from the power controller to Controller:	02 00
	<p>Instructions:</p> <ol style="list-style-type: none"> 1. The commands delivered by Controller to network equipment are separated by 00 Hex,that is,it works as the ending of the former command and the beginning of the following one.00 Hex is the data format of nine, and the ninth one is zero; When receive this data, the indicating needle will do a zero clearing. 2. The bytes of the commands are all 9N1,and the ninth one is 1,refer to the above when come in front of concrete commands. 3. The commands listed above are all sent out in reverse-code manner. 		
The communication protocol of UART8RS-232	Input Baud Rate:	38400 8N1	
	Communication Mode:	RS-232 half duplex	
	<p>Communication Protocol:</p> <p><u>0x1B 0x43 0xDD 0x0D 0x0A</u> Passage (BYTE) Baud Rate (BYTE) Date Length (Int)H (int)L Data.</p> <p style="text-align: center;">Beginning instruction</p> <p style="text-align: center;">refer to the following data definition form</p>		
	Data	Passage (BYTE)	Baud Rate (BYTE)
		Date Length	

Definition:	01: COM1 passage 02: COM2 passage 03: COM3 passage 04: COM4 passage 05: COM5 passage 06: COM6 passage 07: COM7 passage 08: COM8 passage	00 : 300 bits/s 01 : 600 bits/s 02 : 1200 bits/s 03 : 2400 bits/s 04 : 4800 bits/s 05 : 9600 bits/s 06 : 14400 bits/s 07 : 19200 bits/s 08 : 38400 bits/s 09 : 57600 bits/s	The data length of NET485 is measured by Byte The data length of RS-232 is measured by Int *cannot be 0x00
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Note :

\x1B\x43\xDD\x0D\x0A\x07\x00\x00\x00\x03\x01\x02\x03

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Channel Parity Baud rate

\x1B\x43\xDD\x0D\x0A\x01\x00\x05\x00\x03\x01\x02\x03 (This code is the one sent by the first com port, baudrate is 9600, no parity, "010203")

From PGMII to UART8 using direct line, from UART8 to PGMII using indirect line.

CR-UART8 Function Instruction

1. Function Description

- 1) Signal input/ output: two RS-232 ports for communicating with the Controller; Eight delivery outlets COM1~COM8 (RS-323) for signal outputting.
- 2) Working Theory: This equipment communicates with the Controller by RS-232. It can transfer the data delivered by the Controller into the allocated baud rate, and put out the result in the corresponding outlet from COM1 to COM8.

2. Technical Parameters

Dimension:	480x128x38
Weight:	1kg
Input Power:	DC8V~ DC24V
Working Environment:	-10 °C ~ 60 °C
Communication Parameters:	Refer to the concrete communication protocol of this type of machine
Working Current:	35mA
Static Current:	26mA
Power Consumption :	Max. : 0.85W

3. Test

- 1) Communication Test :
 - Connect it to the 485 network, use inquire command to detect this device. The NET light won't be on if can not detect that it is working.
 - Use SSCOM to send data to RS-232 input port, and then test whether the feedback is correct. At the same time, watch whether the LED light will be on or not.
 - All things are OK if the test above passed.
- 2) ID Test :

Set the ID as 01,12,24,48,80, inquire these status and when they can not be detected, that means the circuit is normal.