

Hello,

I got your configuration and did a test to measure delay. My test shows that delay below 1 milliseconds.

Could you tell me how you measured delay?

Or you can do bellow steps to measure the delay:

Connect CSE-M73 to PC via Ethernet and RS-232 to create a loop. Delay will be measure from data going out PC via network card (Start time) to da come back PC via RS-232 (End time).

Note:

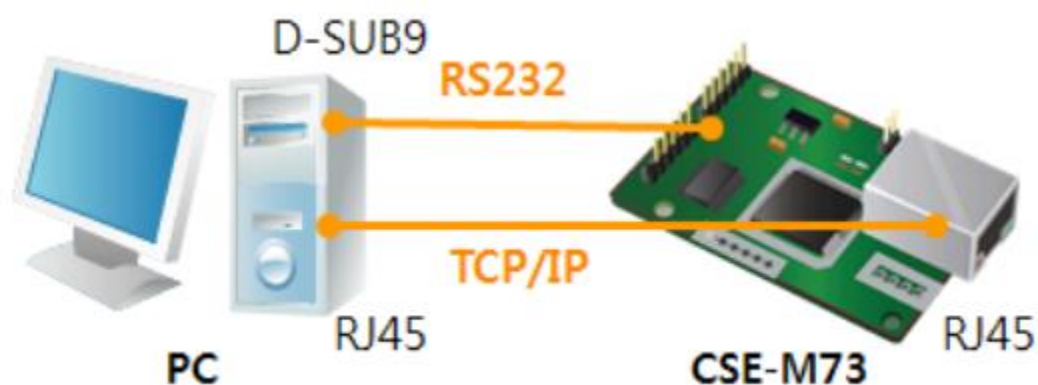
- Data sent via RS-232 and TTL are the same. They only differ from signal level; therefore we can measure delay via RS-232 (PC does not have TTL interface).
- In case if your PC doesn't have a RS232 port, use a USB to RS232 cable.

Start time: using Wireshark to see the time data going out.

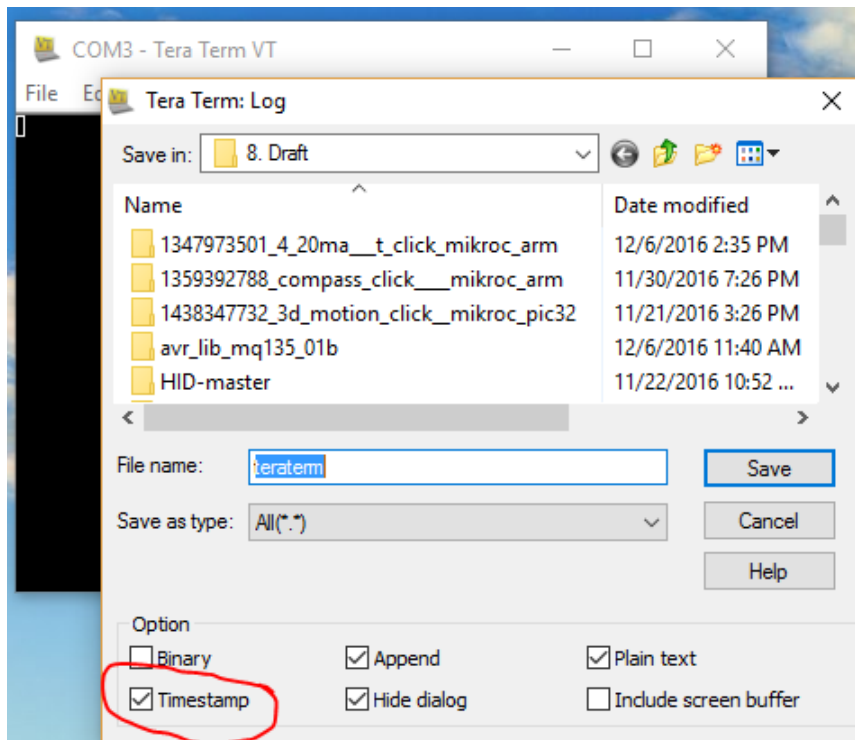
End time: using Tera Term to receive serial data and log time stem to log file

Delay = end time – start time.

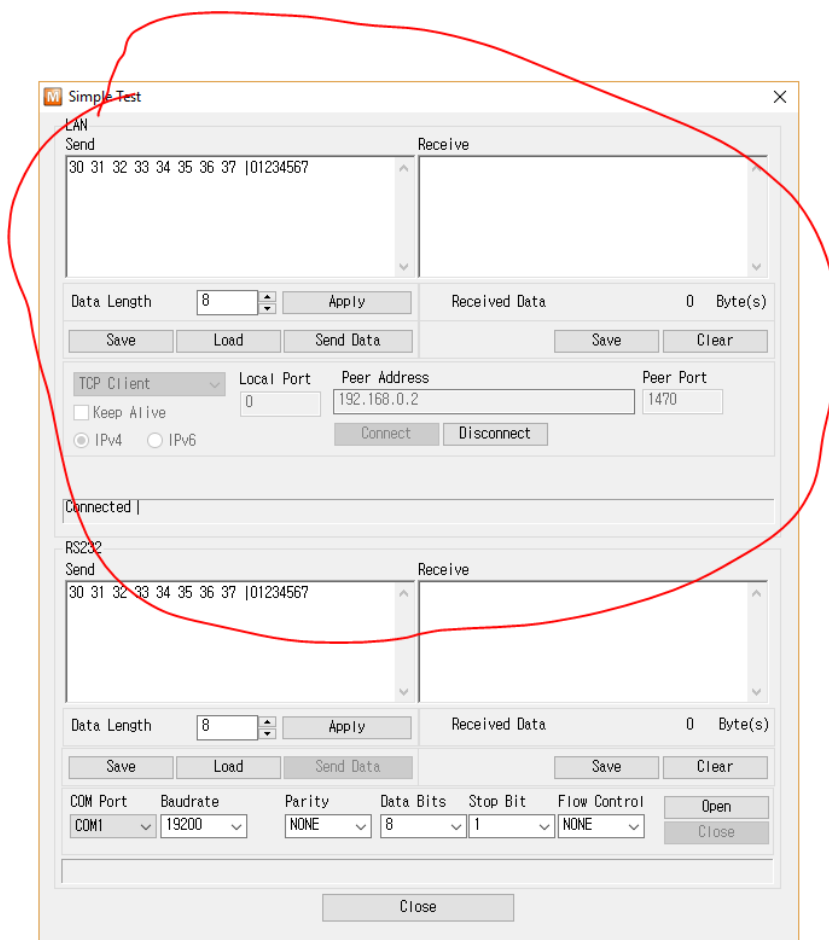
(See below image for connecting and configure software)



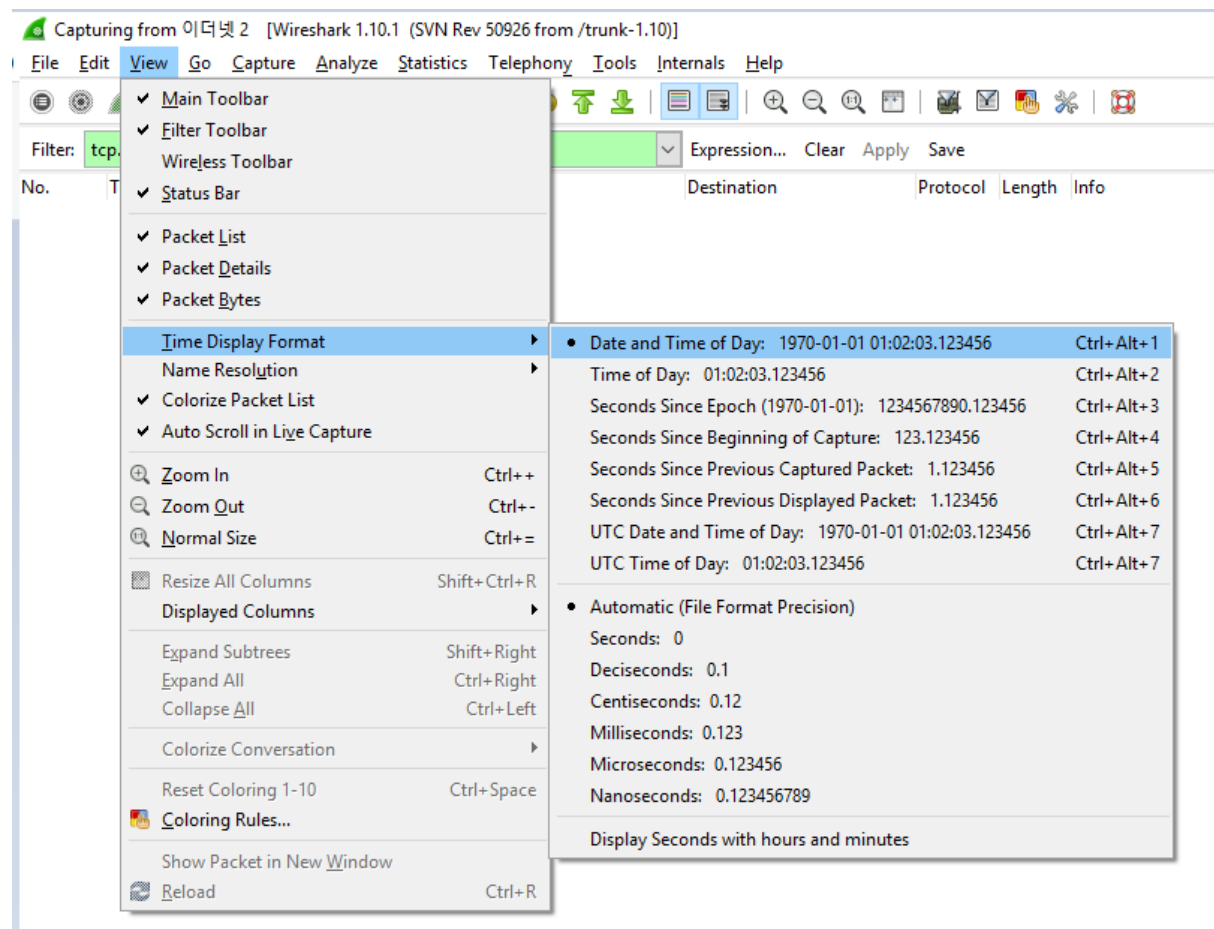
Config Tera Term to receive data and see time stamp of incoming data.



Using Simple Test function on ezManager to send data



Config WireShark to see time stamp



Result: open teraterm.log to see end\_time stamp and check on Wireshark to see start\_time stamp.

Capturing from 이더넷 2 [Wireshark 1.10.1 (SVN Rev 50926 from /trunk-1.10)]

File Edit View Go Capture Analyze Statistics Telephony Tools Internals Help

Filter: tcp.port == 1470 Expression... Clear Apply Save

No.	Time	Source	Destination	Protocol	Length	Info
35	2016-12-07 15:08:35.780305000	192.168.0.3	192.168.0.2	TCP	66	55740 > uaiact [SYN] Seq=0 win=8192
36	2016-12-07 15:08:35.781244000	192.168.0.2	192.168.0.3	TCP	60	uaiact > 55740 [SYN, ACK] Seq=0
37	2016-12-07 15:08:35.781245000	192.168.0.3	192.168.0.2	TCP	54	55740 > uaiact [ACK]
38	2016-12-07 15:08:37.619278000	192.168.0.3	192.168.0.2	TCP	62	55740 > uaiact [PSH, ACK] Seq=0
39	2016-12-07 15:08:37.635431000	192.168.0.2	192.168.0.3	TCP	60	uaiact > 55740 [ACK]
40	2016-12-07 15:08:47.616389000	192.168.0.2	192.168.0.3	TCP	60	[TCP Keep-Alive] uaiact
41	2016-12-07 15:08:47.616492000	192.168.0.3	192.168.0.2	TCP	54	[TCP Keep-Alive ACK]
42	2016-12-07 15:08:57.616969000	192.168.0.2	192.168.0.3	TCP	60	[TCP Keep-Alive] uaiact
43	2016-12-07 15:08:57.617072000	192.168.0.3	192.168.0.2	TCP	54	[TCP Keep-Alive ACK]
46	2016-12-07 15:09:07.617947000	192.168.0.2	192.168.0.3	TCP	60	[TCP Keep-Alive] uaiact
47	2016-12-07 15:09:07.617984000	192.168.0.3	192.168.0.2	TCP	54	[TCP Keep-Alive ACK]
81	2016-12-07 15:09:17.619041000	192.168.0.2	192.168.0.3	TCP	60	[TCP Keep-Alive] uaiact
82	2016-12-07 15:09:17.619120000	192.168.0.3	192.168.0.2	TCP	54	[TCP Keep-Alive ACK]
83	2016-12-07 15:09:27.619629000	192.168.0.2	192.168.0.3	TCP	60	[TCP Keep-Alive] uaiact
84	2016-12-07 15:09:27.619729000	192.168.0.3	192.168.0.2	TCP	54	[TCP Keep-Alive ACK]
112	2016-12-07 15:09:37.620100000	192.168.0.3	192.168.0.2	TCP	60	[TCP Keep-Alive] uaiact
113	2016-12-07 15:09:37.620100000	192.168.0.2	192.168.0.3	TCP	54	[TCP Keep-Alive ACK]

Frame 38: 62 bytes on wire (496 bits), Ethernet II, Src: 40:8d:5c:b9:04:7b (48:61:62:54:00:00), Dst: 02:00:00:00:00:00, Protocol: TCP, Length: 62, Window: 0, Seq: 0, Win: 8192, Len: 0

Simple Test

LAN

Send: 30 31 32 33 34 35 36 37 | 01234567

Receive:

Data Length: 8 Apply Received Data

Save Load Send Data

TCP Client Local Port Peer Address

0 192.168.0.2

☐ Keep Alive

☒ IPv4 ☐ IPv6 Connect Disconnect

Connected

COM3 - Tera Term VT

File Edit Setup Control Window Help

01234567

teraterm - Notepad

File Edit Format View Help

[Wed Dec 07 15:08:37.620 2016] 01234567

The difference is below 1 millisecond.