

Advantech AE Technical Share Document

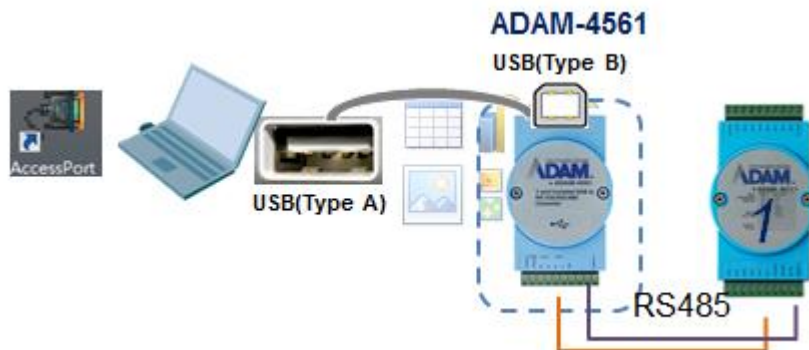
Date	2016/09/30	SR#	1-2578375232
Category	<input checked="" type="checkbox"/> FAQ <input type="checkbox"/> SOP	Related OS	N/A
Abstract	ADAM-4000, How to use Access Port to measure the transition time of serial comm.		
Keyword	Access Port, Transition Time, Serial Communication		
Related Product	ADAM-4000		

■ **Problem Description:**

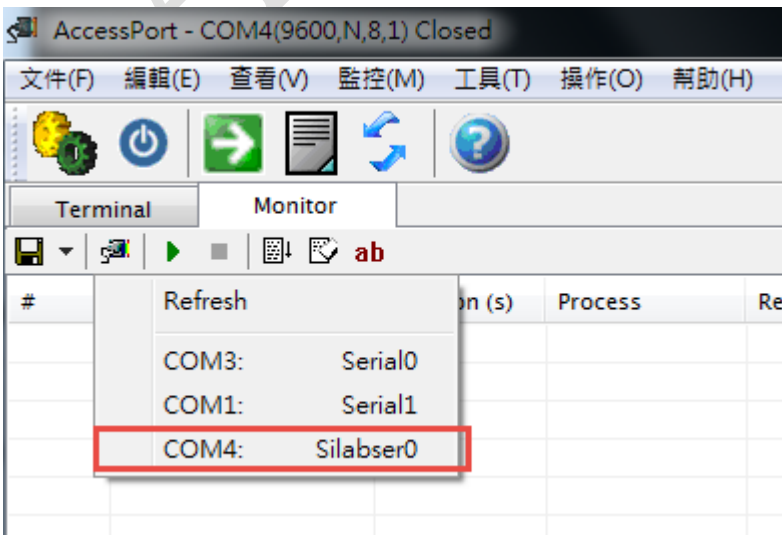
This document shows how to use Access Port to measure the transmit time of serial comm.

■ **Answer:**

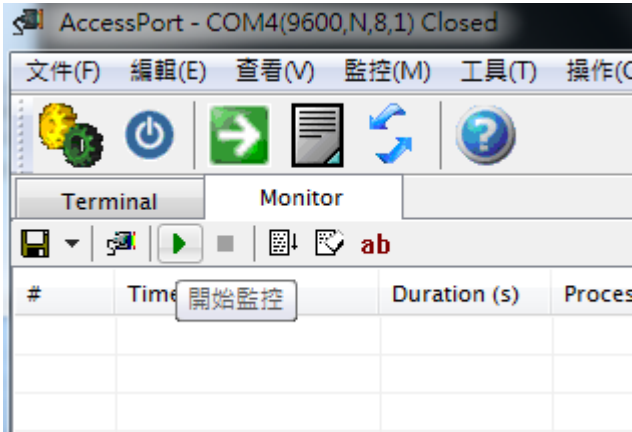
Access Port has the monitor function can help the customer to measure the transition time of serial communication. How can do that? First, the user needs the one of ADAM-4561 to be the gateway to create virtual comport. Open the access port monitor this virtual comport and then use utility to send the data. The monitor window can show time and duration for each ASCII word. The following is the step by step.



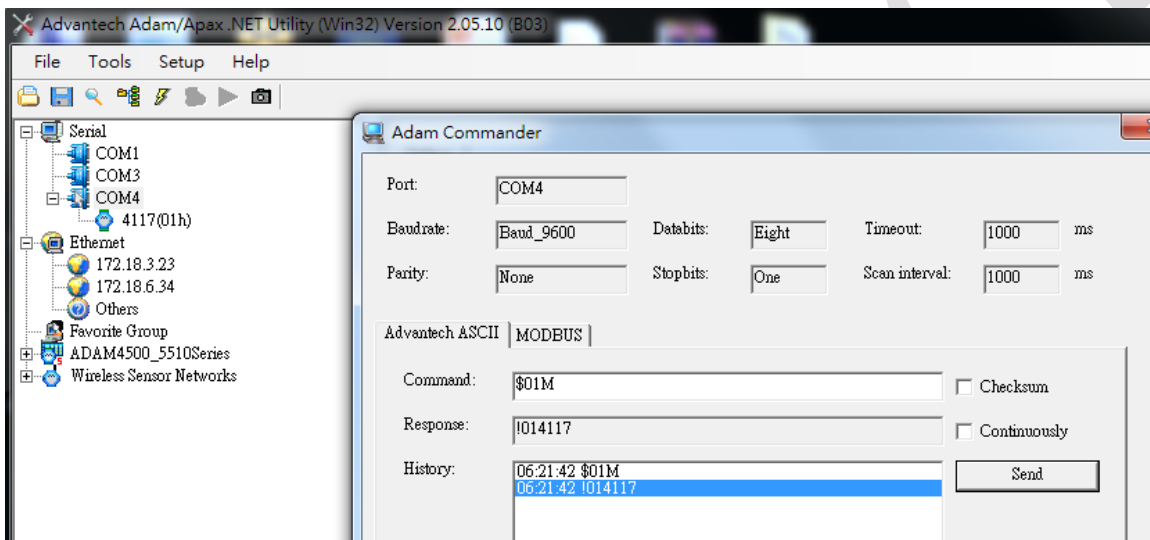
1. Click "Monitor Com Port". Choose the vcom ADAM-4561 created.



2. Click "Start Monitor"



3. Then user can open Utility and send the command.



4. You can see the transition time in Access Port.

#	Time	Duration (s)	Process	Request	Port	Result	Data (String)
210	下午 06:21:33.968	0.00043420	AdamNET.exe	IOCTL_SERIAL_SET_BAUD_RATE	COM4	SUCCESS	Baud Rate: 9600
211	下午 06:21:33.968	0.00036350	AdamNET.exe	IOCTL_SERIAL_SET_RTS	COM4	SUCCESS	
212	下午 06:21:33.969	0.00000000	AdamNET.exe	IOCTL_SERIAL_SET_DTR	COM4		
214	下午 06:21:33.969	0.00032016	AdamNET.exe	IOCTL_SERIAL_SET_CHARS	COM4	SUCCESS	EofChar: 0x0, ErrorChar: 0x0, Break
215	下午 06:21:33.970	0.00031646	AdamNET.exe	IOCTL_SERIAL_SET_HANDFLOW	COM4	SUCCESS	ControlHandShake: 0x1, FlowReplac
216	下午 06:21:33.970	0.00001882	AdamNET.exe	IOCTL_SERIAL_SET_TIMEOUTS	COM4	SUCCESS	ReadIntervalTimeout: 1000, ReadTo
217	下午 06:21:42.071	0.00027854	AdamNET.exe	IOCTL_SERIAL_PURGE	COM4	SUCCESS	Purge: RXCLEAR
218	下午 06:21:42.071	0.00033385	AdamNET.exe	IRP_MJ_WRITE	COM4	SUCCESS	Length: 5, Data: \$01M.
219	下午 06:21:42.072	0.00950570	AdamNET.exe	IRP_MJ_READ	COM4	SUCCESS	Length: 1, Data: !
220	下午 06:21:42.081	0.00084018	AdamNET.exe	IRP_MJ_READ	COM4	SUCCESS	Length: 1, Data: 0
221	下午 06:21:42.082	0.00106997	AdamNET.exe	IRP_MJ_READ	COM4	SUCCESS	Length: 1, Data: 1
222	下午 06:21:42.083	0.00096334	AdamNET.exe	IRP_MJ_READ	COM4	SUCCESS	Length: 1, Data: 4
223	下午 06:21:42.084	0.00093882	AdamNET.exe	IRP_MJ_READ	COM4	SUCCESS	Length: 1, Data: 1
224	下午 06:21:42.085	0.00092115	AdamNET.exe	IRP_MJ_READ	COM4	SUCCESS	Length: 1, Data: 1
225	下午 06:21:42.086	0.00110589	AdamNET.exe	IRP_MJ_READ	COM4	SUCCESS	Length: 1, Data: 7
226	下午 06:21:42.088	0.00094738	AdamNET.exe	IRP_MJ_READ	COM4	SUCCESS	Length: 1, Data: .