

ICPDAS PCIe-S118 Serial Communication Card User Guide

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**QQuiicckk SSttaarrtt
for PPCClllee-SS111188
PPCClllee-SS114488**



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What's in the Shipping Package?

The package includes the following items:

1. PCIe-S118 or PCIe-S148



2. Quick Start Guide (This Guide)



3. Software CD (V6.1 or later)

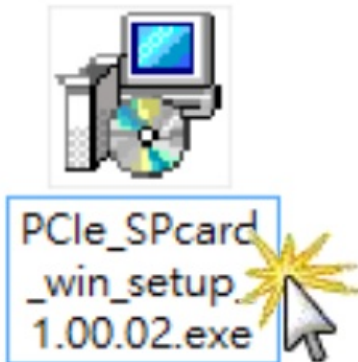


4. CA-PC62M Connector



Installing Windows Driver

1. Launch the Windows XP/7/8/10/2012/ 2016 (32/64-bit) driver setup program (PCle_SPcard_Win_Setup_1.00.02.exe), which can be obtained from either the companion CD-ROM or the web site:



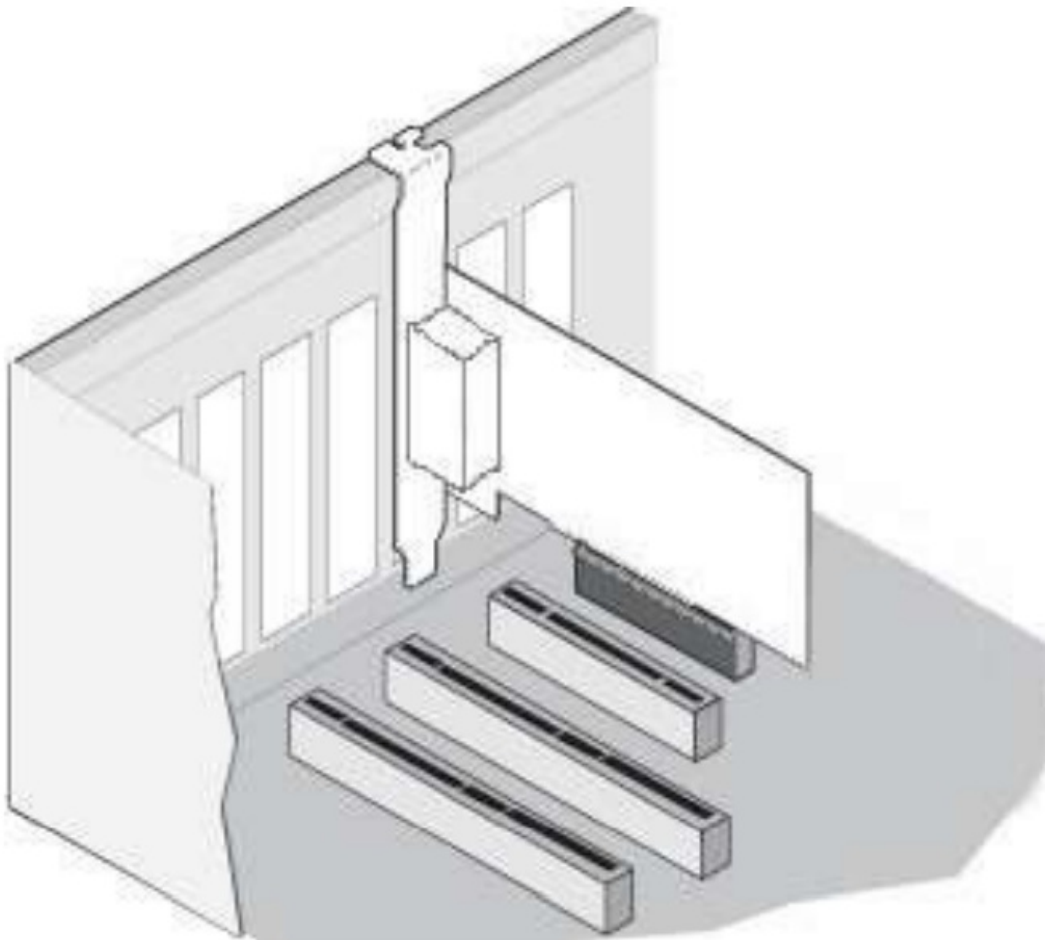
CD: \Napdos\multiport\windows\



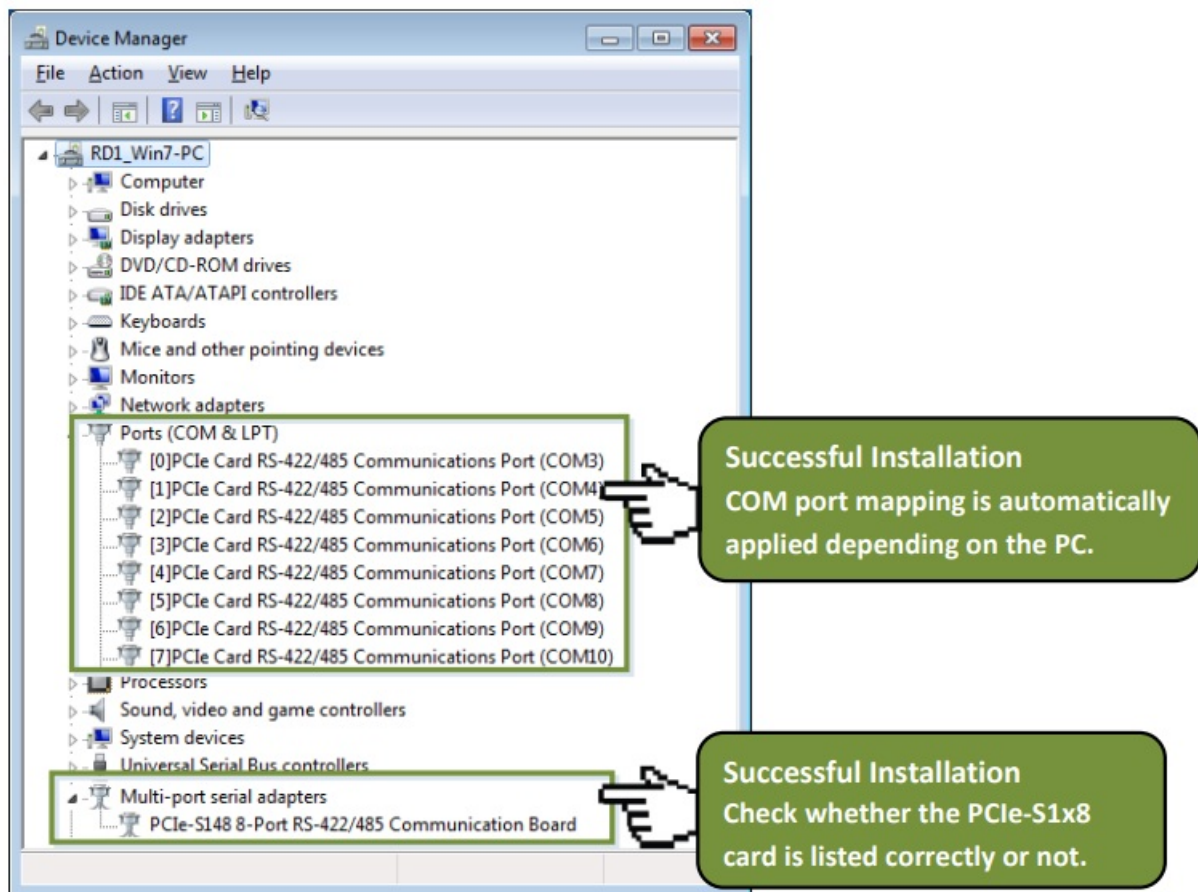
<https://www.icpdas.com/en/download/index.phpnation=US&kw=PCle+Series+Card+Windows+Drive>

2. Click the “Next>” button to start the installation.
3. Click the “Next>” button to install the driver into the default folder.
4. In the installation process, the Command Prompt windows will be displayed, don't care. And please do not close this Command Prompt window in the installation process.
5. Select the “NO, I will restart the computer later” and click the “Finish” button.

Installing the Hardware



1. Shut down and power off your computer.
2. Remove the cover from the computer.
3. Select an unused PCI Express slot.
4. Carefully insert your PCIe-S1x8 card into the PCI Express slot.
5. Replace the PC cover.
6. Power on the computer.
7. Follow the prompt message to finish the Plug & Play steps.
8. Please open the "Device Manager" to verify the COM port installation, as follows steps:
 - 8-1: In Windows 7, Click "Start" button, and then click "Control Panel".
 - 8-2: Click "System and Maintenance", and then click "Device Manager".
 - 8-3: Verify that the COM ports of PCIe-S118/S148 card are listed correctly.



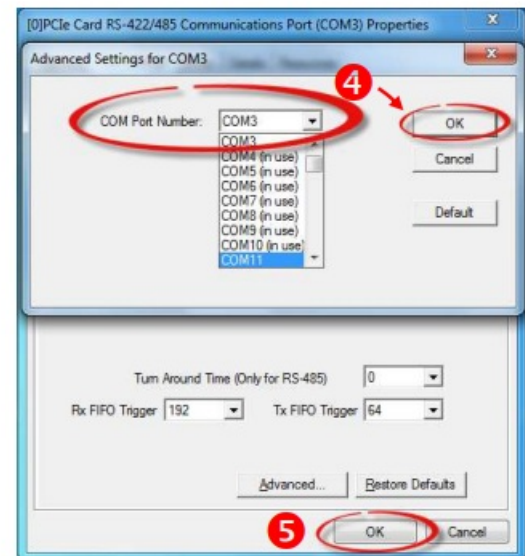
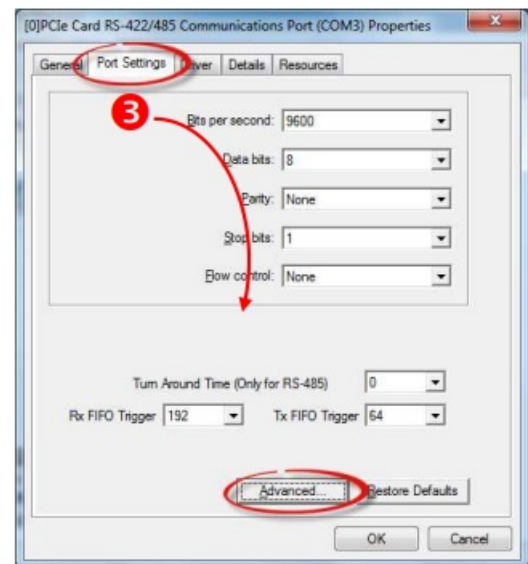
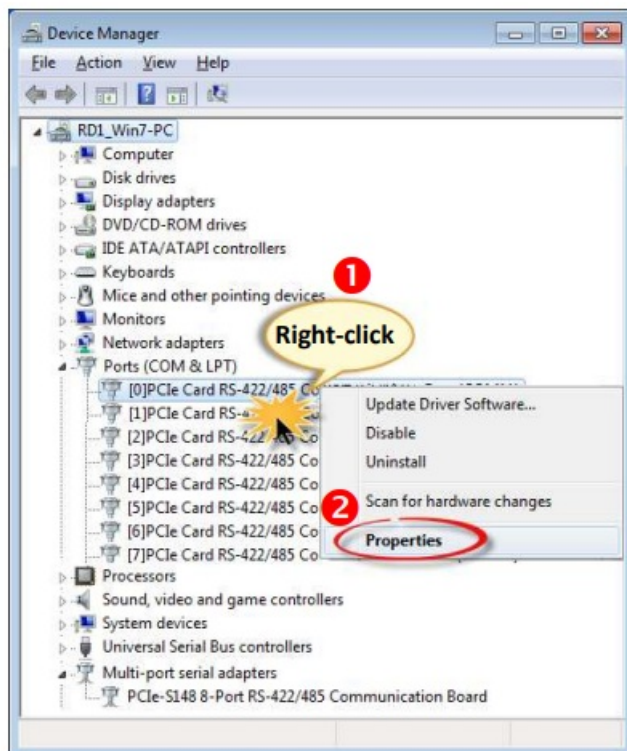
Manual COM Port Configuration

If the auto-configuration for COM Port is messy or that is not what you need, you can change the COM port mappings. For detailed configuration steps, please refer to the following:

1. Open Windows Device Manager and right-click on the serial port of the PCIe-S1x8 series card.
2. Select the "Properties" item from the popup menu.
3. Click the "Port Settings" tab and click the "Advanced..." button.
4. Select the appropriate COM Port number from the "COM Port Number:" drop-down options and click the "OK" button. Note that the COM port display "(in use)" means this COM port is being used.

Therefore, please do not select it.

5. Click the "OK" button in the "Properties" dialog box.
6. Restart your computer to complete the configuration.



Pin Assignments and RS-232 Cable Wiring for PCIe-S118



Terminal No.	Pin Assignment	Terminal No.	Pin Assignment	Terminal No.	Pin Assignment
1	TxD_o	22	RxD_o	43	CTS_()
2	DTR_o	23	DSR_o	44	RTS_o
3	RxD_1	24	DCD_o	45	GND
4	DSR_1	25	TxD_1	46	CTS_1
5	DCD_1	26	DTR_1	47	RTS_1
(16	TxD_2	27	RxD_2	48	CTS_2
7	DTR_2	28	DSR_2	49	RTS_2
8	RxD_3	29	DCD_2	50	GND
9	DSR_3	30	TxD_3	51	CTS_3
10	DCD_3	31	DTR_3	52	RTS_3
11	RxD_4	32	GND	53	CTS_4
12	DSR_4	33	TxD_4	54	RTS_4
13	DCD_4	34	DTR_4	55	GND
14	TxD_S	35	RxD_S	56	CTS_S
15	DTR_S	36	DSR_S	57	RTS_5
16	RxD_6	37	DCD_5	58	GND
17	DSR_6	38	TxD_6	59	CTS_6
18	DCD_6	39	DTR_6	60	RTS_6
19	RxD_7	40	GND	61	CTS_7
20	DSR_7	41	TxD_7	62	RTS_7
21	DCD_7	42	DTR_7		



Terminal No.	Pin Assignment
01	DCD
2	RxD
03	TxD
4	DTP
05	GND
6	DSR
07	RTS
8	CTS
9	
Female DB•62 to Male DB-9 Connector	

PCle-S118 Card		RS-232 Wiring		Device
Signal	PIN		PIN	Signal
RxD	2	←	3	TxD
TxD	3	→	2	RxD
GND	5	↔	5	GND
DTR	4	→	6	DSR
--	--		1	DCD
DCD	1	←	--	--
DSR	6	←	4	DTR
RTS	7	→	8	CTS
CTS	8	←	7	RTS

Pin Assignments and RS-422/485 Cable Wiring for PCle-S148



Terminal No-	Pin Assignmen t	Terminal No.	Pin Assignmen t	Terminal No	Pin Assignmen t
1	RxD0+	22	TxD0+/Data0+)	43	
2	RxD0-	23		44	
3	TxD1+/Data1+	24	TxD0-/Data0-	45	GND
4	—	25	RxD1+	46	
OS	TxD1-/Data1-	26	RXD1-	47	
6	RxD2+	27	TxD2+/Data2+	48	
7	RxD2-	28	—	49	
	TxD3+/Data3+	29	TxD2-/Data2-	50	GND
9		30	RxD3+	51	
10	TxD3-/Data3-	31	RXD3-	52	
11	TxD4+/Data4+	32	GND	53	
12		33	FxD4+	54	
13	TxD4-/Data4-	34	12)04-	SS	GND
14	RxD5+	35	TxD5+/Data5+	56	
15	RxD5-	36		57	
16	TxD6+/Data6+	37	TxD5-/Data5-	58	GND
17		38	RxD6+	59	
18	TxD6-/Data6-	39	FxD6-	60	
19	TxD7+/Data7+	40	GND	61	
20		41	RxD7+	62	
21	TxD7-/Data7-	42	RxD7-		
CON1					



Terminal No.	Pin Assignment
01	DCD
2	RxD
03	TxD
4	DTP
05	GND
6	DSR
07	RTS
8	CTS
9	
Female DB-62 to Male DB-9 Connector	

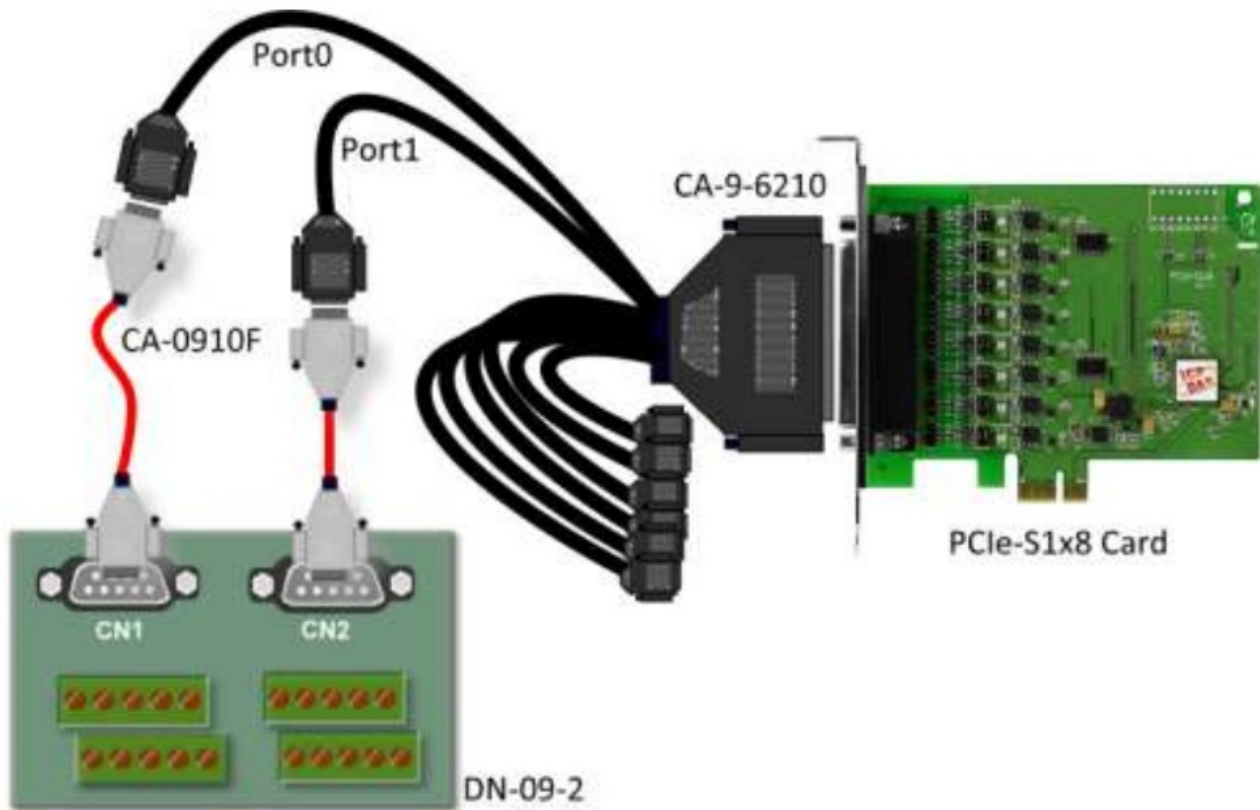
PCIe-5148 Card		RS-485 Wiring	Device	
Signal	PIN		PIN	Signal
DATA-	1		2	DATA-
DATA+	2			DATA+

Note: The RS-485 bus is a differential (balanced) signal, thus you cannot wire the Data+ with Data- directly for a single port loop-back test. It will not work at all.

PCIe-S148 Card		RS-422 Wiring Ob.	Device	
Signal	PIN 1		PIN	Signal –
TxD-			4	RxD
TxD+			3	RxD+
RxD+	3		2	TxD+
RxD-			1	TxD-
GND			5	GND

Self-Test Wiring

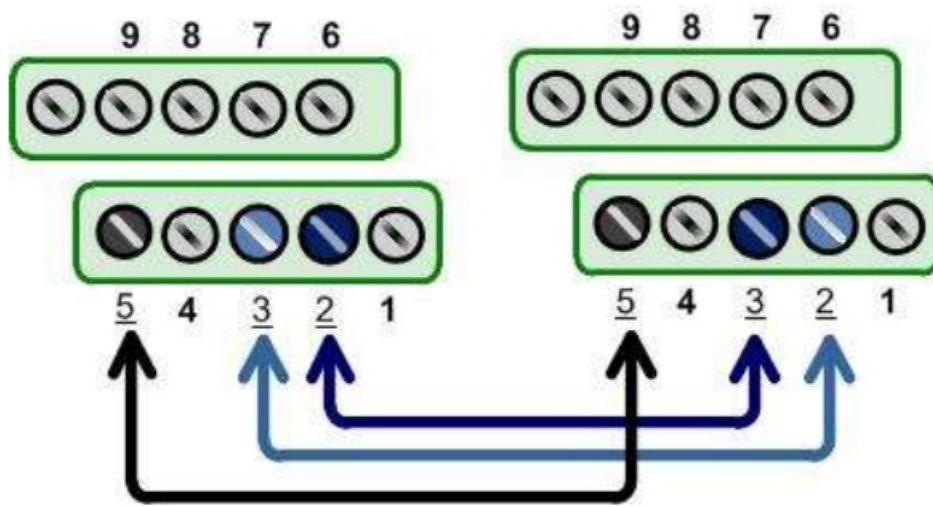
Step 1: Connect the DN-09-2 terminal board (optional) to the PCIe-S1x8 series card using the CA-9-6210 and CA-0910F cables (optional).



Step 2: Wire the Port 0 and Port1.

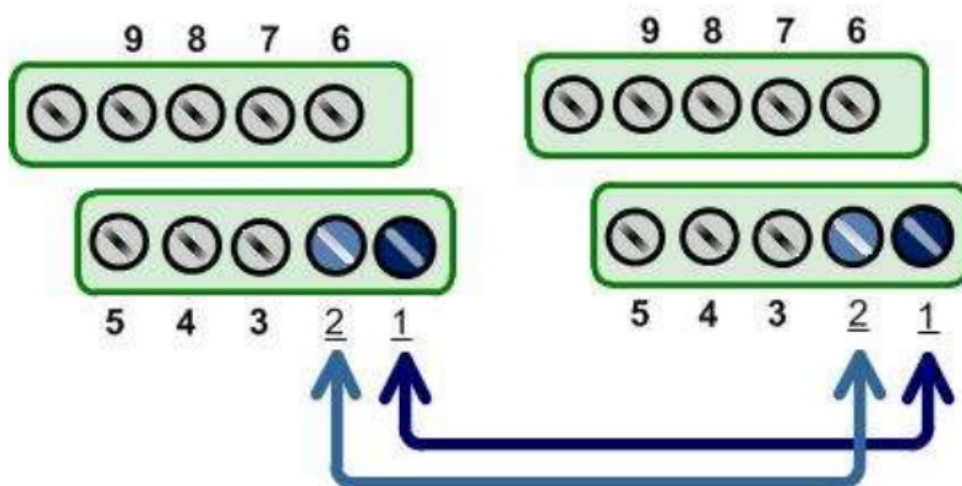
- PCIe-S118 card (RS-232 Wiring): Shorting the RxD, TxD and GND pins of both Port0 and Port1.

Port0 Signal	PIN		PIN	Signal
TxD0	3	↔	2	RxD1
RxD0	2	↔	3	TxD1
GND	5	↔	5	GND



- PCIe-S148 card (RS-485 Wiring): Shorting the Port0 Data+ and Port1 Data+ and the Port0 Data- and Port1 Data- pins.

Port0	PIN		PIN	Port1
Signal				Signal
TxD0	3	↔	2	Data1-
RxD0	2	↔	3	Data1+



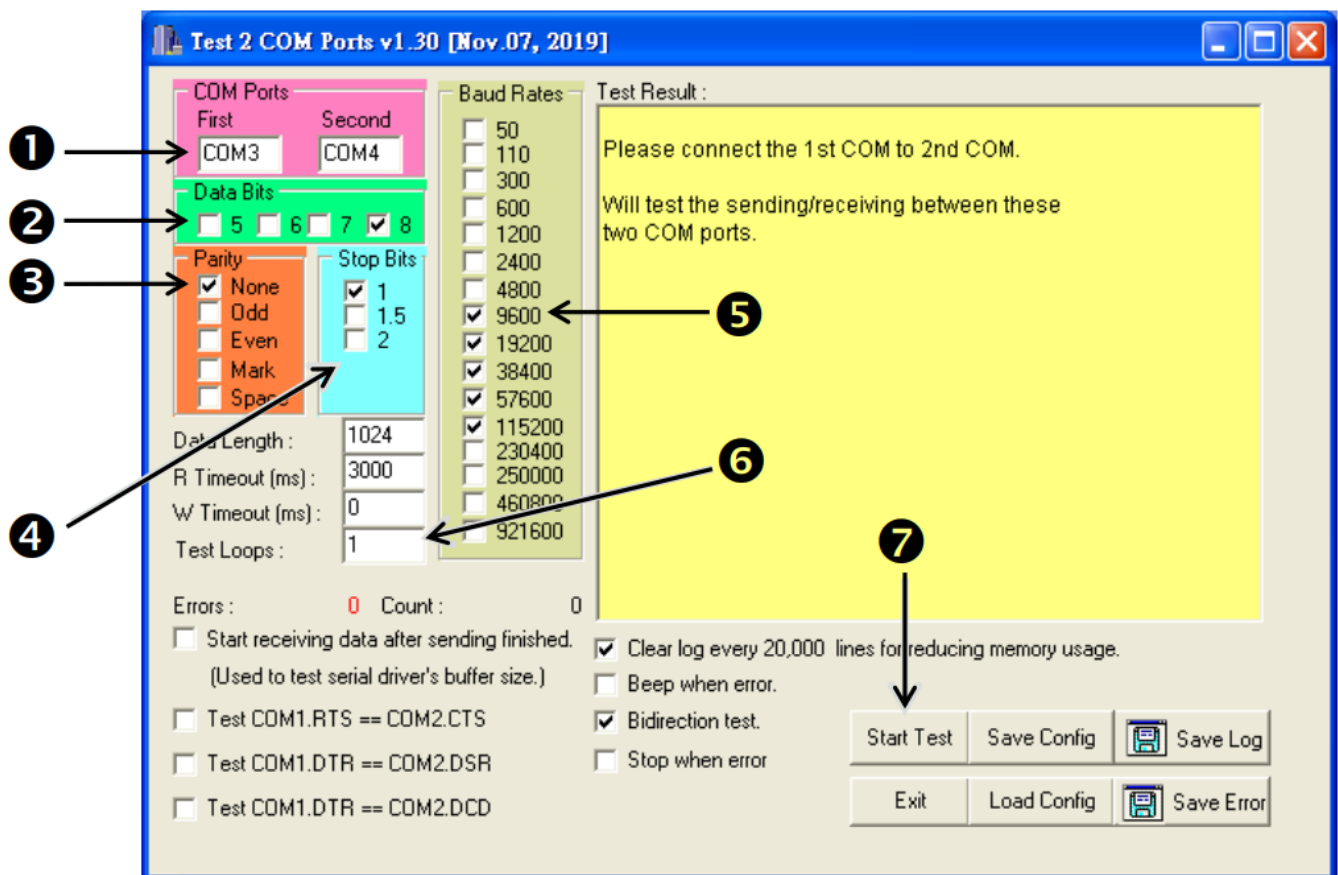
Execute the Test Program

Step 1: Execute the Test2COM.exe program, which can be downloaded from:

Step 2: Set the appropriate COM Ports, Baud Rate and Data Format information to the values shown in the image below.

1. COM Ports: Enter COM3 (First), and COM4 (Second).
2. Data Bits: Check "8"
3. Parity: Check "None"

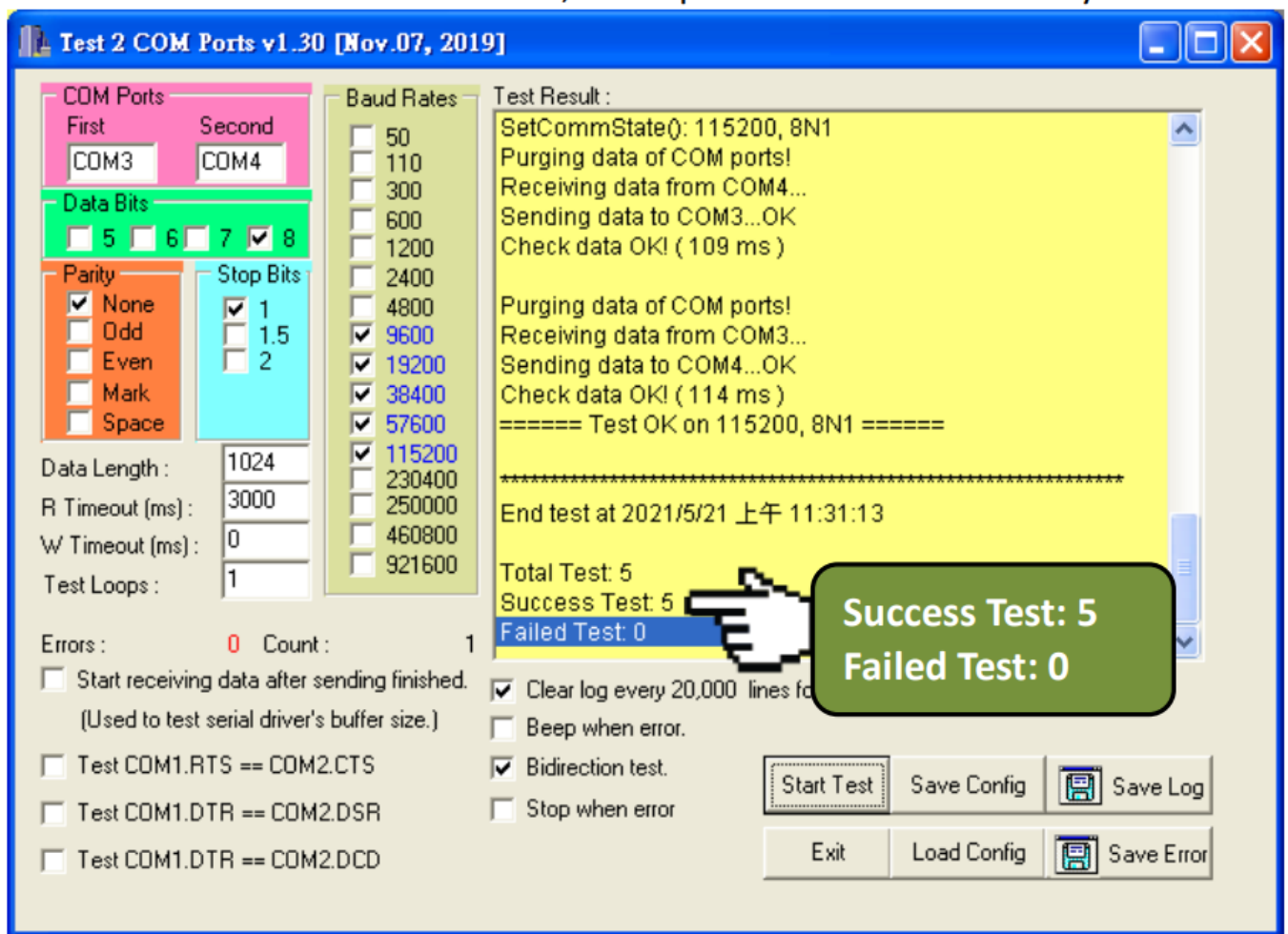
4. Stop Bits: Check "1"
5. Baud Rates: Check values 9600 to 115200
6. Test Loops: Type "1"
7. Click the "Start Test" button to begin the



Successful Testing

Once the test is complete, verify the test results.

If the result indicates that the test was successful, the expanded COM Port is ready-to-use.



Related Information

PCIe-S118/PCIe-S148 card product page:

https://www.icpdas.com/en/product/guide+Industrial_Communication+Serial_Communication+Multi-port_Serial_Board#793

DN-09-2, CA-0910F and CA-9-6210 product page (optional):

<https://www.icpdas.com/en/product/DN-09-2>

<https://www.icpdas.com/en/product/CA-0910F>

<https://www.icpdas.com/en/product/CA-9-6210>

Software and documentation:

CD: \Napedos\multiport\

<https://www.icpdas.com/en/download/index.phpmodel=PCIe-S118>

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E-mail: service@icpdas.com

Documents / Resources



[ICPDAS PCIe-S118 Serial Communication Card](#) [pdf] User Guide

PCIe-S118, PCIe-S148, PCIe-S118 Serial Communication Card, PCIe-S118, Serial Communication Card, Communication Card, Card

References

-  [ICP DAS](#)
-  [ICP DAS](#)
-  [ICP DAS](#)
-  [ICP DAS](#)
-  [CA-0910F](#)
-  [CA-9-6210](#)
-  [DN-09-2](#)
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Manuals+.