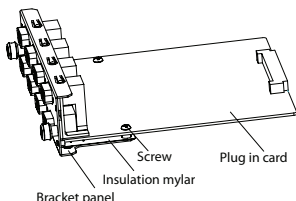# UNOP-1618D/1628D
8-port RS-232/422/485 with and without port-to-port Isolation

Packing List

Before installation, make sure that you have the UNOP-1628D/1618D suit which includes the card and panel as below.

Screw — Plug in card
Insulation mylar
Bracket panel

If anything is missing or damaged, contact your distributor or sales representative immediately.

Overview

UNOP-1618D/1628D are 8 serial ports cards, with the following specifications::

- 8-port RS-232/422/485
- Automatic RS-485 data flow control
- 2,000 V_{DC} Isolation Protection (UNOP-1628D)
- IRQ: All use the same IRQ assigned by PCI Bus
- Data bits: 5, 6, 7, 8
- Stop bits: 1, 1.5, 2
- Parity: None, Even, Odd
- Baud-rate (bps):
  - RS-232: 50~115.2 k
  - RS-422/485: 50~921.6 k
- Transmission Distance: 1000 m (RS-422/485)
- Data Signals:
  - RS-232: DCD,RxD,TxD,DTR,GND,DSR,RTS,CTS,RI
  - RS-485: Data+, Data-, GND
  - RS-422: Tx+, Tx-, Rx+, Rx-, GND

Notes

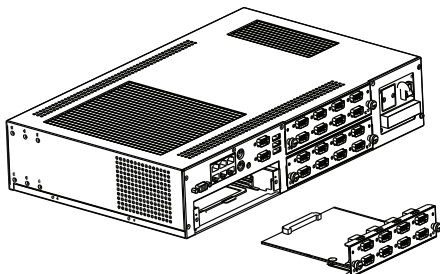For more information on this and other Advantech products, please visit our websites at:

http://www.advantech.com

http://www.advantech.com/eAutomation

For technical support and service:

http://www.advantech.com.tw/eservice

This manual is for UNOP-1618D/1628D

| Part No: 2003T62803	5th Edition
	July 2012

Diagram

Installation

The UNOP-1628D/1618D are expansion cards for the UNO-4673A/4683 which has 3 expansion slots, the UNOP-1628D/1618D can be plugged into any of the 3 slots in the UNO-4673A/4683. Follow these steps to integrate into the UNO-4673A/4683:

- Select one of the slots: unscrew the two screws on the blank panel of the slot then remove the blanking plate.
- Plug the UNOP-1628D/1618D into the selected slot of the UNO-4673A/4683 carefully and fix it by the two screws on the panel.

Pin Assignment

UNOP-1628D/UNOP-1618D serial ports COM1~COM8
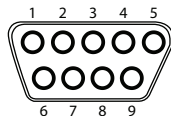
| Pin	RS-232	RS-422	RS-485
1	DCD	TX-	Data-
2	RxD	TX+	Data+
3	TxD	RX+	
4	DTR	RX-	
5	GND	GND	GND
6	DSR		
7	RTS		
8	CTS		
9	RI		

COM Port Configuration

Please follow the below description to set the COM ports, please also refer to the UNO-4673A/4683's user manual for detailed function description:
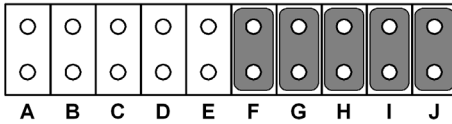
1. Selection of RS-232 or RS-422/485

COM Port	Jumper	COM Port	Jumper
COM1	CN3	COM5	CN7
COM2	CN4	COM6	CN8
COM3	CN5	COM7	CN9
COM4	CN6	COM8	CN10

RS-232 Jumper Setting (Default)

A   B   C   D   E   F   G   H   I   J
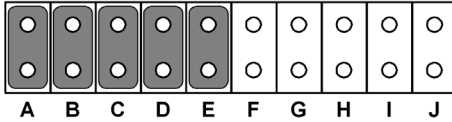
RS-422/485 Jumper Setting

A   B   C   D   E   F   G   H   I   J

2. Switch the RS-485 auto-flow control or RS-422 Master/Slave mode (SW1)

COM Port	DIP of SW1
COM1	DIP1
COM2	DIP2
COM3	DIP3
COM4	DIP4
COM5	DIP5
COM6	DIP6
COM7	DIP7
COM8	DIP8

SW1 Status	Description
ON	RS-422: Master mode RS-485: N/A
OFF (Default)	RS-422: Slave mode RS-485: Auto flow control

3. Setting the Terminal Resistor

| COM Port	Jumper	COM Port	Jumper
COM1	JP1	COM5	JP5
COM2	JP2	COM6	JP6
COM3	JP3	COM7	JP7
COM4	JP4	COM8	JP8
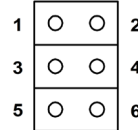
Short	Description
1-3	Add 120 Ohm terminal resistor on Tx+/Tx- of RS-422 or Data+/Data- of RS-485
3-5	Add 300 Ohm terminal resistor on Tx+/Tx- of RS-422 or Data+/Data- of RS-485
2-4	Add 120 Ohm terminal resistor on Rx+/Rx- of RS-422
4-6	Add 300 Ohm terminal resistor on Rx+/Rx- of RS-422

LED Indicators

There are LED indicators on the front panel of UNO-4673A/4683 for indicating the system running status. You can know the COM status of UNOP-1618D/1628D by the consistent slot LED indicators.
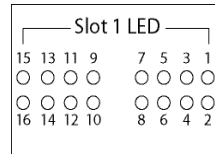
LED No.	COM Status
1	COM1 Tx
2	COM1 Rx
3	COM2 Tx
4	COM2 Rx
5	COM3 Tx
6	COM3Rx
7	COM4 Tx
8	COM4 Rx
9	COM5 Tx
10	COM5 Rx
11	COM6 Tx
12	COM6 Rx
13	COM7 Tx
14	COM7 Rx
15	COM8 Tx
16	COM8 Rx