

DATA SHEET

SMI OE Converter Module (1394CON-BXXX)

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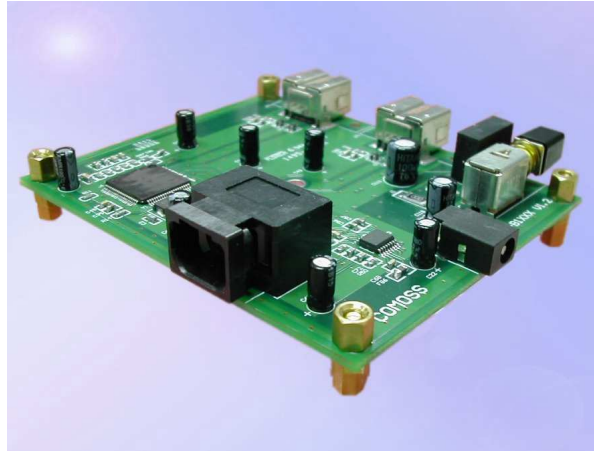
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■ 1. Description

The 1394CON-BXXX series are interface converters that use IEEE 1394b 9pin connectors and SMI (Small Multimedia Interface) POF transceivers. The 1394CON-BXXX series are treated as IEEE 1394/ 1394a/ 1394b repeaters at S100/ S200/ S400 signaling rates. They are also treated as SMI POF repeaters that fully support IEEE Std 1394b at S100/ S200 signaling rates.



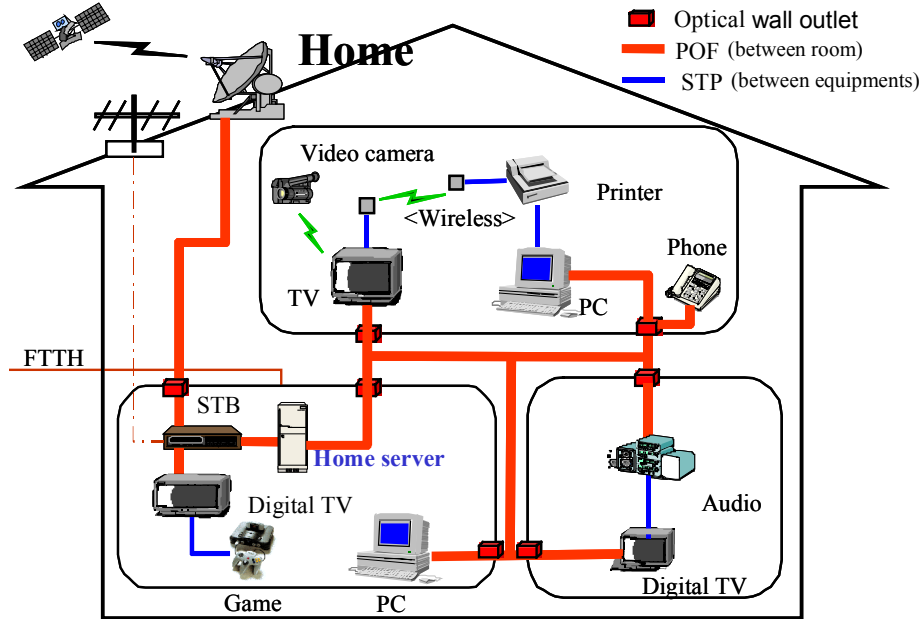
Their applications are in any CE devices of the home network or embedded car network such as PC, HDTV, STB, CD& SCD players and consumer electronic devices.

■ **2. Features**

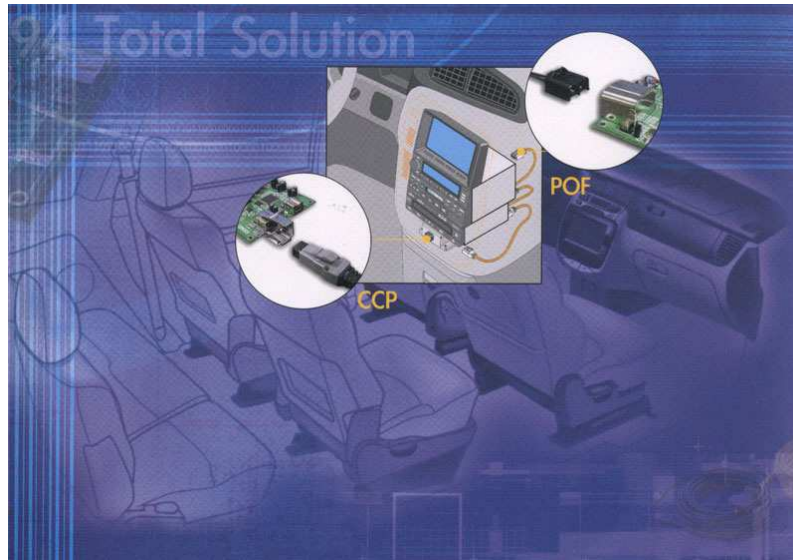
Parameter	Optical Port	Electrical Port
Standard compatibility	1. IEEE Std 1394b-2002	1. IEEE Std 1394-1995 2. IEEE Std 1394a-2000 3. IEEE Std 1394b-2002
Data Rate	100Mbps, 200Mbps	100Mbps, 200Mbps, 400Mbps
Transmitting Length	50M at POF interface	4.5M at any 1394 interface
Interface connector	SMI POF transceiver (COMOSS SMIDX series)	IEEE 1394b 9pin connector (COMOSS HSR series)
Accessory cable	SMI POF patch cord (COMOSS SMIPP series)	IEEE 1394 cable assembly (COMOSS 1394C series)
Operating Temperature	0~70 °C or -40~85 °C (See the order information)	
Operating Voltage	8V~35V DC (Refer to 12V DC)	
Operating Current	1A DC max.	
DC Power Connector	OD: 5.5, ID: 2.1 mm DC plug suitable	

■ 3. Application

An example in the home network



An example in the car network



■ **4. Order Information**

1394CON- B 1 0 0 0

(1) (2) (3) (4) (5)

(1) Converter Type:

*A: IDB-1394 POF interface

*B: SMI POF interface

*C: CAT-5 UTP interface

(2) Connector Type:

*1: one POF/ CAT-5 transceiver and two 1394b 9pin connectors

*2: two POF/ CAT-5 transceivers and one 1394b 9pin connector

(3) Operating Temperature:

*0: 0°C ~70 °C

*1: -40°C ~85 °C

(4) CCP Option:

*0: without core body

*1: with core body

(5) Accessory:

*0: without 110/220VAC to 12VDC adapter

*1: with 110/220VAC to 12VDC adapter

COMOSS has developed a series of products including IDB1394 POF transceivers, SMI POF transceivers, POF patch cords, CAT-5 UTP patch cords, core bodies, latched covers and 1394b cable assemblies. If there is any product needed, please contact with our Web- site (www.comoss.com). We can also design these products with the customer to meet customer's application requirement. Any OEM& ODM is welcome.

■ 5. System Requirements

5.1 Please make sure have a 1394 controller in your devices or systems.

5.2 Please confirm that 1394 controllers are able to work normally in systems.

5.3 If you have already installed 1394 controller and work normally, there is no special hardware requirement such as CPU speed, memory size and chipsets.

5.4 If you have already installed 1394 in your OS, there is no special software requirement.

5.5 The technical advice for the AC to DC power adapter

The 1394CON series have been designed to use internal +12V power from 1394 controller. However, the 1394CON still is designed one external +12V power to supply, if 1394 controller isn't designed in +12V power. In general, most of 1394 controller is capable to supply the sufficient DC power.

■ 6. User's Guide

6.1 Please keep the following procedure to install. If the sequences are not correctly followed, the improper or no operation will be occurred.

6.2 Make sure your 1394 controller work normally when one 1394 cable assembly is connected with two systems.

6.3 Plug the 1394 cable assemblies into the systems and 1394CONs. **Don't** use any intermediate cable or adapter between 1394CONs and systems.

6.4 Plug the longer POF patch cord into two 1394CONs. **Don't** use any intermediate cable or adapter between two 1394CONs.

6.5 Switch on the push-button switch of your 1394CONs.

6.6 The red and green indicator of 1394CONs shine. This condition mean the 1394 connection between two systems is started.

Notes: You can do hot-plug in any interface by following Step 6.2~6.4.

6.7 If 1394CONs don't work normally (red indicator dark or green indicator flashing), you must use the AC to +12VDC power adapter (5.5mm DC plug) that supply more than 500mA. Afterward restart your 1394CONs and 1394 connection is started again.

An example for reference



■ 7. Troubleshooting

7.1 The 1394CONs are not energized. (Red indicator dark)

- 7.1.1 Make sure if 1394b cable assembly is certainly plugged in 1394b receptacle.
- 7.1.2 Confirm if AC to +12VDC power adapter work normally.
- 7.1.3 Make sure if the push-button switch push on.
- 7.1.4 Confirm if the operations of Step 6.2~6.6 are correct.
- 7.1.5 Switch on the push-button switch of your 1394CONs again.

7.2 The 1394 signal isn't connected between two systems. (Green indicator dark or flashing)

- 7.2.1 Make sure if 1394b cable assembly is certainly plugged in 1394b receptacle.
- 7.2.2 Make sure if POF patch cord is certainly plugged in POF receptacle.
- 7.2.3 Confirm the step 7.1.1~7.1.4 again.
- 7.2.4 Switch on the push-button switch of your 1394CONs again.

7.3 The 1394 signal isn't connected between two systems but red and green indicators shine.

- 7.3.1 Make sure if 1394b cable assembly is certainly plugged in 1394b receptacle.
- 7.3.2 Confirm if the operations of Step 6.2~6.4 are correct.
- 7.3.3 Switch on the push-button switch of your 1394CONs again.

7.4 If there is any technical issue, please contact with our sales department (Sales@comoss.com.tw).