規格書 DataSheet

CUSTOMER:

Company Name

公司名稱

Model NO:

FWB-PCI3202

DESCRIPTION:

Three port FireWire 800 to PCI Host Adapter

Revision:

1.1.1

CUSTOMER APPROVED

APPROVAL

ENGINNER

ISSUE BY



IOI Technology Corporation

映奥股份有限公司

台北縣新店市寶橋路235巷125號4樓 4F, No.125, Lane 235, Pao Chiao Road, Hsin Tian City, Taipei, Taiwan, R.O.C.

TEL: 02-89191358 FAX: 02-89191359

Contents

Overview:	3
 Introduction Specification Operating Systems Requirements RoHS Environmental Condition Block Diagram 	
Silk Screen and Picture	4
Silk Screen of FWB-PCI3202 P.C.B.Picture of FWB-PCI3202A PCBAPicture of FWB-PCI3202B PCBA	
Mechanical Dimension:	7
Parts Information:	
- Connector	
Datasheet of Bilingual Connector Datasheet of FireWire Connector Datasheet of Wafer Connector	9
- Integrated Circuit	
Datasheet of TSB83AA23 More Information on Website: http://www.ti.com/	11
Certifications:	
- CE - FCC	
RoHS Declaration Letter:	

FWB-PCI3202 Overview

Introduction:

FWB-PCl3202 is a three port OHCl 1.1 Compliant FireWire 800 (IEEE-1394b) PCl Host Adapter featuring Texas Instruments OHCl 1.1 Compliant FireWire 800 (IEEE-1394b) Single Chip Host Controller.

Highlight:

- 32-bit PCI Host interface
- Bilingual (1394b) connector (with screw lock)
- Big IDE 4-pin DC Power Connector for supplying power to the 1394 Bus

Specification:

Host Bus:	- 33-MHz/32-Bit PCI Interface - 3.3-V and 5-V PCI Signaling Environment
IEEE 1394 Std Support:	 Fully Supports Provisions of IEEE P1394b Revision 1.33+ at 1-Gigabit Signaling Rates Fully Supports Provisions of IEEE 1394a.2000 and 1394.1995 Standard for High Performance Serial Bus Fully Interoperable With Firewire., i.LINK., and SB1394., Implementation of IEEE Std 1394
1394 Bus Transfer Rate:	Provides three fully backward-compatible, (IEEE Std 1394a-2000 fully compliant) Bilingual IEEE Std 1394b-2002 cable ports at S100/S200/S400/S400B/S800 megabits per second (Mbits/s).
IEEE-1394 to PCI Controller:	Texas Instruments TSB83AB23
DV and DA Enhancement:	- Digital Video and Audio performance enhancements Extended resume signaling for compatibility with legacy DV components.
Power Management:	Power-down features to conserve energy in battery-powered applications include: automatic device power down during suspend, PCI power management for link-layer, and inactive ports powered down
Number of ports:	FWB-PCI3202B: Three External Bilingual Ports (with screw lock) FWB-PCI3202A: Two External Bilingual Ports (with screw lock) + One FireWire Port
Bus Power Connector:	Big IDE 4-pin DC Power Connector

Operating Systems Requirements:

The 1394b function (host driver) is supported (built in) by the following OS:

- Windows 2000 SP4 or later
- Windows XP SP2 or later
- Windows Vista SP1 or later
- Mac OS 10.4 or later
- Linux kernel 2.6.23 or later.

RoHS:

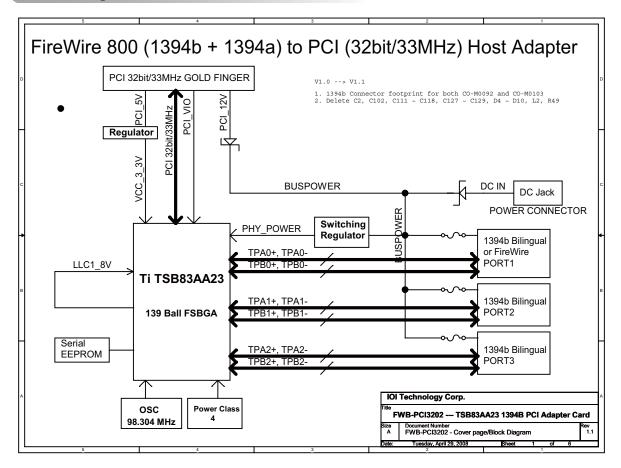
This Host Adapter is satisfied with RoHS regulations. Material of solder is satisfied with following definition.

	Material of solder
Solder Paste	SN-3.0AG-0.5CU
Flow and hand soldering	SN-0.7CU+NI

Environmental Condition:

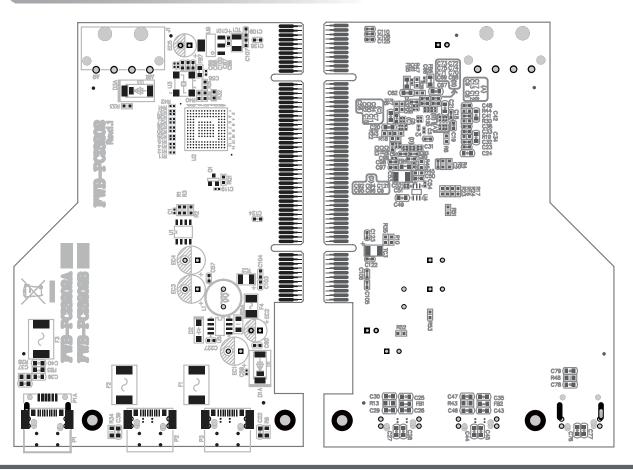
Operating free-air temperature: $0 \sim 65$ degree C Storage temperature range: $-20 \sim 100$ degree C Humidity Operating: $0 \sim 80\%$ RH, Non-condensing

Block Diagram:



Silk Screen and Pictures

Silk Screen of FWB-PCI3202 P.C.B.:



Picture of FWB-PCI3202A PCBA:



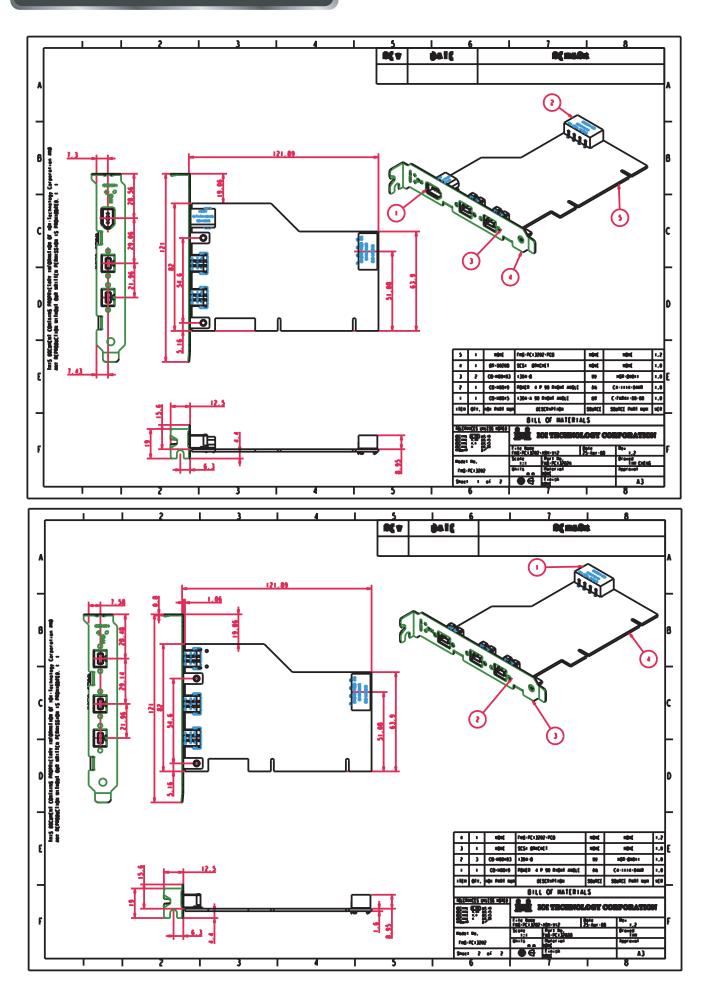


Picture of FWB-PCI3202B PCBA:

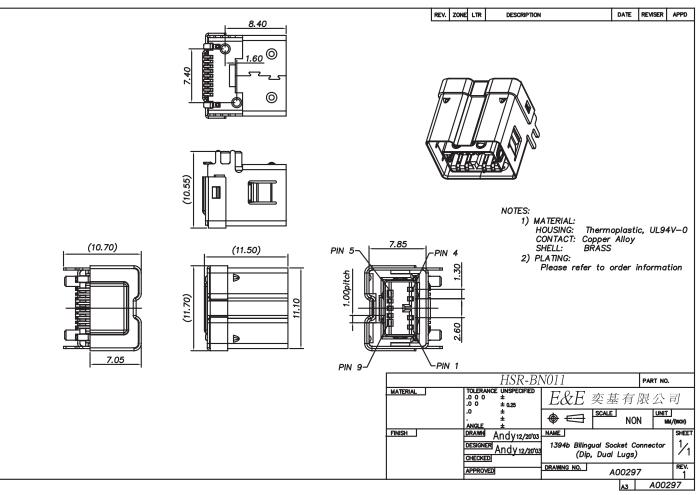


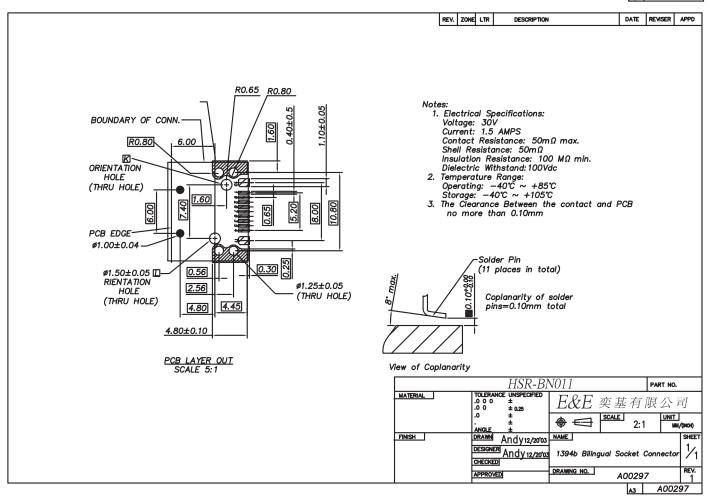


Mechanical Dimension

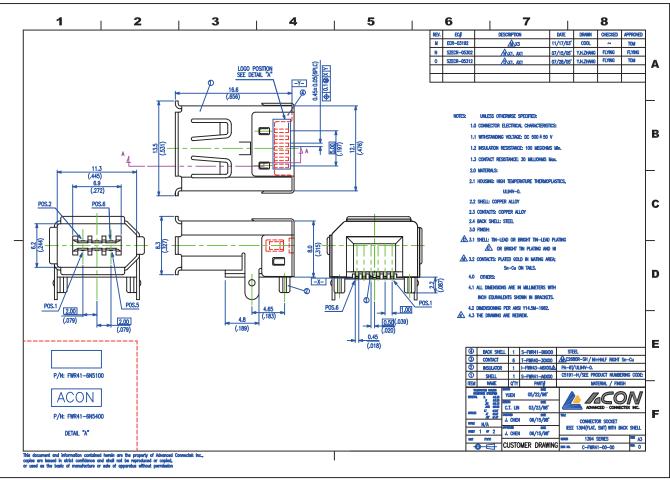


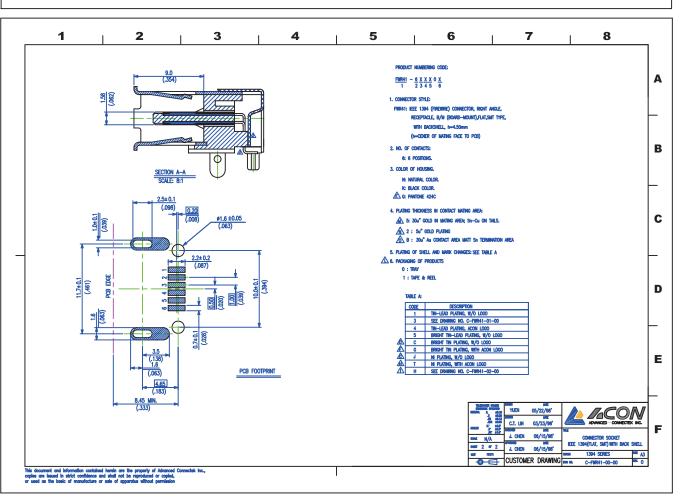
Datasheet of Bilingual Connector



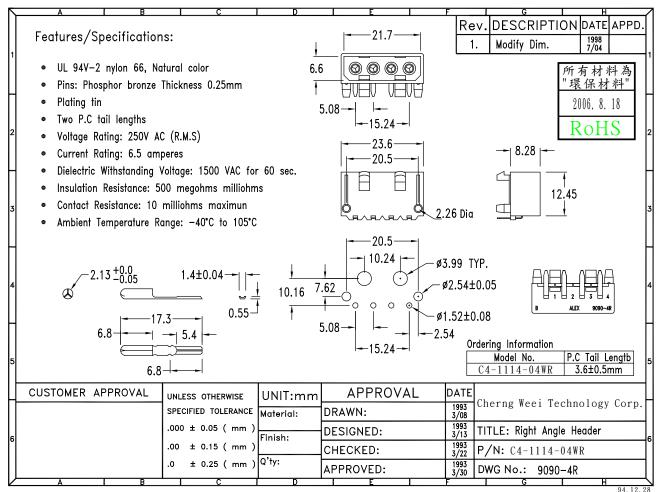


Datasheet of FireWire Connector

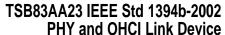




Datasheet of Wafer Connector



PDF created with FinePrint pdfFactory Pro trial version http://www.fineprint.com



SLLS787-FEBRUARY 2007



1 Introduction

1.1 Features

- Fully Supports Provisions of IEEE Std 1394b-2002 Revision 1.33+ at 1-Gigabit Signaling Rates
- Fully Supports Provisions of IEEE Std 1394a-2000 and IEEE Std 1394-1995 for High-Performance Serial Bus
- Fully Interoperable With Firewire[™], i.LINK[™], and SB1394 Implementations of IEEE Std 1394
- Provides Three Fully Backward-Compatible, (IEEE Std 1394a-2000 Fully Compliant)
 Bilingual IEEE Std 1394b-2002 Cable Ports at up to 800 Megabits per Second (Mbps)
- Full IEEE Std 1394a-2000 Support Includes:
 - Connection Debounce
 - Arbitrated Short Reset
 - Multispeed Concatenation
 - Arbitration Acceleration
 - Fly-By Concatenation
 - Port Disable/Suspend/Resume
- Extended Resume Signaling for Compatibility With Legacy DV Devices
- Power-Down Features to Conserve Energy in Battery-Powered Applications
- Low-Power Sleep Mode
- Fully Compliant With Open Host Controller Interface (OHCI) Requirements
- Cable Power Presence Monitoring
- Cable Ports Monitor Line Conditions for Active Connection to Remote Node
- Register Bits Give Software Control of Contender Bit, Power-Class Bits, Link Active Control Bit, and IEEE Std 1394a-2000 Features
- Interoperable With Other 1394 Physical Layers (PHYs) Using 1.8-V, 3.3-V, and 5-V Supplies
- Low-Jitter, External Crystal Oscillator Provides Transmit and Receive Data at 100/200/400/800 Mbps and Link-Layer Controller Clock at 49.152 MHz and 98.304 MHz
- Separate Bias (TPBIAS) for Each Port
- Software Device Reset (SWR)

- Fail-Safe Circuitry Senses Sudden Loss of Power to the Device and Disables Ports to Ensure That TSB83AA23 Does Not Load TPBIAS of Any Connected Device and Blocks Any Leakage From the Port Back to Power Plane
- IEEE Std 1394a-2000-Compliant Common-Mode Noise Filter on Incoming Bias Detect Circuit to Filter Out Crosstalk Noise
- Port Programmable to Force IEEE Std 1394a-2000 Mode to Allow Use of IEEE Std 1394a-2000 Connectors (IEEE Std 1394b-2002 Signaling Must Not Be Put Across IEEE Std 1394a-2000 Connectors or Cables)
- 3.3-V and 5-V PCI Signaling Environments
- Serial-Bus Data Rates of 100 Mbps, 200 Mbps, 400 Mbps, and 800 Mbps
- Physical Write Posting of up to Three Outstanding Transactions
- Serial ROM or Boot ROM Interface Supports
 2-Wire Serial EEPROM Devices
- 33-MHz/32-Bit PCI Interface
- Multifunction Terminal (MFUNC Terminal 1):
 - PCI_CLKRUN Protocol Per PCI Mobile Design Guide
 - General-Purpose I/O (GPIO)
 - CYCLEIN/CYCLEOUT for External Cycle Timer Control for Customized Synchronization
- PCI Burst Transfers and Deep FIFOs to Tolerate Large Host Latency
 - Transmit FIFO—5K Asynchronous
 - Transmit FIFO—2K Isochronous
 - Receive FIFO—2K Asynchronous
 - Receive FIFO-2K Isochronous
- D0, D1, D2, and D3 Power States and PME Events Per PCI Bus Power Management Interface Specification
- Programmable Asynchronous Transmit Threshold
- Isochronous Receive Dual-Buffer Mode
- Out-of-Order Pipelining for Asynchronous Transmit Requests



Please be aware that an important notice concerning availability, standard warranty, and use in critical applications of Texas Instruments semiconductor products and disclaimers thereto appears at the end of this document.

OHCI-Lynx is a trademark of Texas Instruments. Firewire is a trademark of Apple Computer, Inc. i.LINK is a trademark of Sony Kabushiki Kaisha TA Sony Corporation. All trademarks are the property of their respective owners.





v.er.er.er.er.er.er.e

CERTIFICATE

Issued Date: Jun. 11, 2008 Report No.: 084236R-ITCEP11V04

This is to certify that the following designated product

Product : 3-port Firewire 800 (IEEE-1394b) to PCI Host Adapter

Model Number: FWB-PCI3202A, FWB-PCI3202B
Company Name: IOI Technology Corporation

This product, which has been issued the test report listed as above in QuieTek Laboratory, is based on a single evaluation of one sample and confirmed to comply with the requirements of the following EMC standard.

EN 55022:2006 Class B

EN 61000-3-2:2006

EN 61000-3-3:1995+A1: 2001+A2: 2005

AS/NZS CISPR 22: 2006

EN 55024: 1998+A1: 2001+A2: 2003

IEC 61000-4-2 Edition 1.2: 2001-04

IEC 61000-4-3 Edition 3.0: 2006

IEC 61000-4-4: 2004

IEC 61000-4-5 Edition 2.0: 2005

IEC 61000-4-6 Edition 2.2: 2006

IEC 61000-4-8 Edition 1.1: 2001-03

IEC 61000-4-11 Second Edition: 2004-03

TEST LABORATORY

Vincent Lin / Deputy Manager



verekerekerekereke

리카리카리카리카리카디카드카티카드카디카디카티카드카드카드

CERTIFICATE

Issued Date: Jun. 11, 2008 Report No.: 084236R-ITUSP02V02

This is to certify that the following designated product

Product : 3-port Firewire 800 (IEEE-1394b) to PCI Host Adapter

Model Number: FWB-PCI3202A, FWB-PCI3202B

Company Name: IOI Technology Corporation

This product, which has been issued the test report listed as above in QuieTek Laboratory, is based on a single evaluation of one sample and confirmed to comply with the requirements of the following EMC standard.

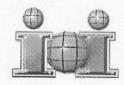
FCC CFR Title 47 Part 15 Subpart B: 2007 Class B, CISPR 22: 2005

ANSI C63.4: 2003

ICES-003 Issue 4: 2004

TEST LABORATORY

Vincent Lin / Deputy Manager



IOI Technology Corporation

4F, No. 125, Lane 235, Pao-Chiao Road, Hsin Tian City, Taipei, Taiwan Tel: +886(2)8919-1358 Fax: +886(2)8919-1359 http://www.ioi.com.tw/

RoHS Declaration Letter

To

IOI Customer

Herewith we would like to declare that our product listed below:

Product description: 3-port FireWire800 (1394b) to PCI Host Adapter

Model no: FWB-PCI3202

is fully compliant with the EU Directive 2002/95/EC Restriction of use of certain Hazardous Substances in electrical and electronic equipment (RoHS).

The statement above is, to the best of our knowledge, true and accurate at the time this Declaration of Compliance is signed.

For and on behalf of IOI Technology Corporation

Taiwan April 21, 2008

Place & date

Name, signature and company chop