



Connect Tech Inc.

USER MANUAL

SUMIT to PCIe/104 (PCI/104-Express) Adapter



CTIM-00072 (0.00) - November 29, 2011

Table of Contents

Table of Contents2
Copyright Notice3
Trademark Acknowledgement3
Revision History.....3
Introduction4
Features4
1. Block Diagram4
2. Pinouts and Signal Interconnect5
3. Product Errata.....6
Limited Lifetime Warranty7
Customer Support Overview7
Contact Information7

Copyright Notice

The information contained in this document is subject to change without notice. Connect Tech Inc. shall not be liable for errors contained herein or for incidental consequential damages in connection with the furnishing, performance, or use of this material. This document contains proprietary information that is protected by copyright. All rights are reserved. No part of this document may be photocopied, reproduced, or translated to another language without the prior written consent of Connect Tech, Inc.

Copyright © 2011 by Connect Tech Inc.

Trademark Acknowledgement

Connect Tech Inc. acknowledges all trademarks, registered trademarks and/or copyrights referred to in this document as the property of their respective owners.

Not listing all possible trademarks or copyright acknowledgments does not constitute a lack of acknowledgment to the rightful owners of the trademarks and copyrights mentioned in this document.

Revision History

Revision 0.00	Original document
----------------------	-------------------

Introduction

Connect Tech's PCI/104-Express to PCI Express Adapter enables users to install any x1 lane PCIe/104 or PCI/104-Express card in a SUMIT-104 stack.

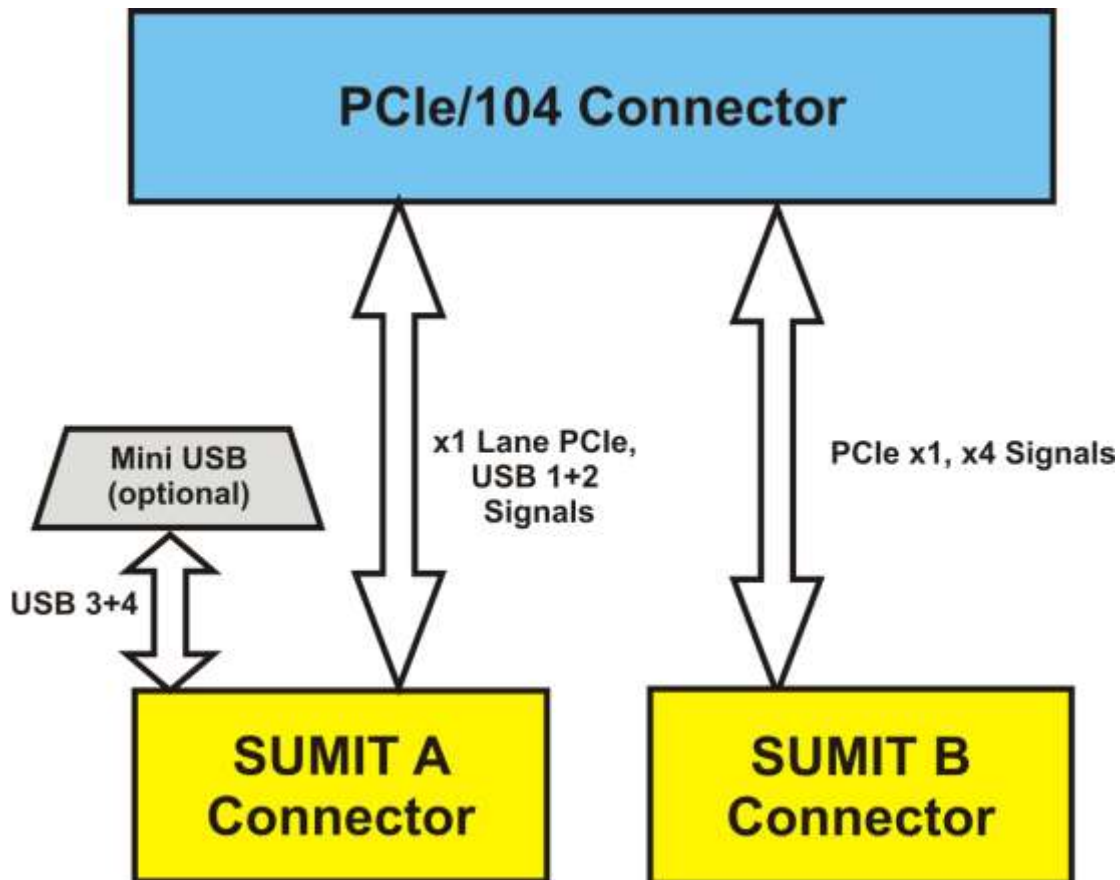
This convenient adapter board enables the testing and development of PCI/104-Express cards in the SUMIT environment.

Features

- SUMIT-ISM Legacy type 1 and 2 compatible
- PCI/104-Express & PCIe/104 Compatible

1. Block Diagram

Below is a high level view of the SUMIT to PCIe/104 (PCI/104-Express) Adapter. Aside from the additional USB signals available on optional mini-usb connectors the rest of the PCI express signals are direct connections to those of the PCI/104-Express signals. See [Table 1](#) in this manual for a full listing of pinouts and interconnections.



2. Pinouts and Signal Interconnect

Below is a listing of all signal interconnect between the SUMIT A and B connectors and the PCI/104-Express connector. Power, ground and presence detection signals have been removed from this list. Any other PCI/104-Express signals not listed, are no connects.

Signal Group	SUMIT Connector	SUMIT Pinout		PCI-104/Express Connector Pinout	
		Pin No.	Pin Name	Pin No.	Pin Name
USB	A	11	USB_OC#	1	USB_OC#
	A	17	USB3+		No Connection*
	A	19	USB3-		No Connection*
	A	23	USB2+		No Connection*
	A	25	USB2-		No Connection*
	A	29	USB1+	5	USB_1p
	A	31	USB1-	7	USB_1n
	A	35	USB0+	6	USB_0p
A	37	USB0-	8	USB_0n	
PCI Express	A	41	A_PETp0	12	PEX1_0Tp
	A	42	A_PERp0	24	PEX1_0Rp
	A	43	A_PETn0	14	PEX1_0Tn
	A	44	A_PERn0	26	PEX1_0Rn
	A	47	PERST#	2	PERST#
	A	48	A_CLKp	36	PEX1_0Clkp
	A	49	WAKE#	53	WAKE#
	A	50	A_CLKn	38	PEX1_0Clkn
	B	3	B_PETp0	11	PEX1_1Tp
	B	4	B_PERp0	23	PEX1_1Rp
	B	5	B_PETn0	13	PEX1_1Tn
	B	6	B_PERn0	25	PEX1_1Rn
	B	9	C_CLKp	48	PEX16_x8_x4_Clkp
	B	10	B_CLKp	35	PEX1_1Clkp
	B	11	C_CLKn	50	PEX16_x8_x4_Clkn
	B	12	B_CLKn	37	PEX1_1Clkn
	B	15	C_PETp0	50	PEX16_0Tp
	B	16	C_PERp0	110	PEX16_0Rp
	B	17	C_PETn0	60	PEX16_0Tn
	B	18	C_PERn0	112	PEX16_0Rn
B	39	PERST#		Not Connected***	
B	40	WAKE#		Not Connected***	
Other	A	4	SMB_I2C_DATA	47	SMB_DAT
	A	6	SMB_I2C_CLK	49	SMB_CLK
	A	8	SMB_I2C_ALERT#	51	SMB_ALERT#
		* USB signals 2 and 3 available on optional mini USB connectors (P3, P5)			
		*** WAKE# and PERST# signals on SUMIT-B connection to PCIe/104 PERST#/WAKE# available, not connected by default.			

Table 1 – SUMIT to PCI/104-Express Pinout

All Pin Names have been referenced from the official specifications provided by the [SFF-SIG](#) and [PC/104 Consortium](#).

3. Product Errata

ADG039 Limitations

- This product provides two single x1 lane PCI Express connections, meaning that a maximum of 2 PCIe/104 or PCI/104-Express x1 peripherals and one x4 peripheral can be connected.

Limited Lifetime Warranty

Connect Tech Inc. provides a Lifetime Warranty for all Connect Tech Inc. products. Should this product, in Connect Tech Inc.'s opinion, fail to be in good working order during the warranty period, Connect Tech Inc. will, at its option, repair or replace this product at no charge, provided that the product has not been subjected to abuse, misuse, accident, disaster or non Connect Tech Inc. authorized modification or repair.

You may obtain warranty service by delivering this product to an authorized Connect Tech Inc. business partner or to Connect Tech Inc. along with proof of purchase. Product returned to Connect Tech Inc. must be pre-authorized by Connect Tech Inc. with an RMA (Return Material Authorization) number marked on the outside of the package and sent prepaid, insured and packaged for safe shipment. Connect Tech Inc. will return this product by prepaid shipment service.

The Connect Tech Inc. lifetime warranty is defined as the serviceable life of the product. This is defined as the period during which all components are available. Should the product prove to be irreparable, Connect Tech Inc. reserves the right to substitute an equivalent product if available or to retract lifetime warranty if no replacement is available.

The above warranty is the only warranty authorized by Connect Tech Inc. Under no circumstances will Connect Tech Inc. be liable in any way for any damages, including any lost profits, lost savings or other incidental or consequential damages arising out of the use of, or inability to use, such product.

Customer Support Overview

If you experience difficulties after reading the manual and/or using the product, contact the Connect Tech reseller from which you purchased the product. In most cases the reseller can help you with product installation and difficulties.

In the event that the reseller is unable to resolve your problem, our highly qualified support staff can assist you. Our online Support Center is available 24 hours a day, seven days a week on our website at: www.connecttech.com/sub/support/support.asp. Please go to the [Download Zone](#) or the [Knowledge Database](#) for product manuals, installation guides, device driver software and technical tips. Submit your questions to our technical support engineers at support@connecttech.com. Our technical support is always free.

Contact Information

Telephone/Facsimile

Technical Support representatives are ready to answer your call Monday through Friday, from 8:30 a.m. to 5:00 p.m. Eastern Standard Time. Our numbers for calls are:

Toll: 800-426-8979 (North America only) | Tel: 519-836-1291 | Fax: 519-836-4878 (online 24 hours)

Email/Internet

You may contact us through the Internet. Our email and URL addresses are:

sales@connecttech.com | support@connecttech.com | www.connecttech.com

Mail/Courier

Connect Tech Inc.
42 Arrow Road
Guelph, Ontario, N1K 1S6, Canada