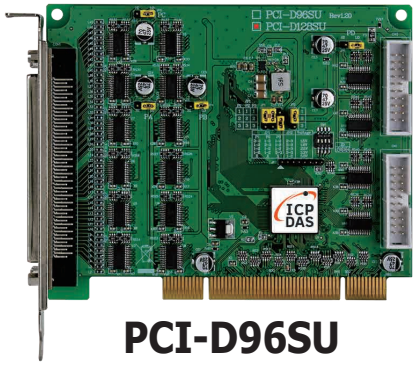


PCI-D96SU

Universal PCI, 96-ch, 32-bit Digital I/O Board

PCI-D128SU

Universal PCI, 128-ch, 32-bit Digital I/O Board

Features

- Support the +3.3/+5 V PCI bus
- 96/128 Channels of Digital I/O
- Three 32-bit Bi-direction I/O Ports
- Digital Pattern Generator
- Bi-direction Programmable I/O Ports under Software Control
- Pattern-matching and Change State Interrupt Monitoring
- DIO Operating Voltage: +1.8 V, +2.5 V, +3.3 V, +5 V
- Pull-high/Pull-low Jumpers for DI Channels
- Supports Card ID (SMD Switch)
- Supports a High-density SCSI II 100-pin Connector

Introduction

The PCI-D96SU/PCI-D128SU supports 3.3 V/5 V PCI bus. These cards provide 96/128 Digital I/O lines that consist of three 32-bit bi-directional ports for use in a variety of Digital I/O applications. Each channel could be setting for DI or Output. They provide a variety of operating voltage (+1.8 V, +2.5 V, +3.3 V and +5 V) for customers need.

The PCI-D96SU/PCI-D128SU cards include an onboard Card ID switch that enables the board to be recognized via software if two or more boards are installed in the same computer. The pull-high/low jumpers allow the DI status to be predefined instead of remaining floating if the DI channels are disconnected or interrupted. The PCI-D96SU/PCI-D128SU provides a single high-density connector that reduces the amount of installation space required for the card in the computer.

These cards support various OS versions, such as DOS and 32/64-bit Windows 10/8/7/2008/2003/XP. DLL and Active X control together with various language sample programs based on Turbo C++, Borland C++, Microsoft C++, Visual C++, Borland Delphi, Borland C++ Builder, Visual Basic, C#.NET, Visual Basic.NET and LabVIEW are provided in order to help users quickly and easily develop their own applications.

Hardware Specifications

Model	PCI-D96SU	PCI-D128SU
Hardware		
Connector	Female SCSI II 100-pin x 1	Female SCSI II 100-pin x 1 , 20-pin Box Header x 2
Card ID	Yes (4-bit)	
Digital Input		
Channels	96 (Bi-Direction)	128 (Bi-Direction)
Type	1.8 V/TTL, 2.5 V/TTL , 3.3 V/TTL, 5 V/TTL	
ON Voltage Level	1.8V/TTL(Logic 1: 1.2 V Min.) , 2.5V/TTL(Logic 1: 1.7 V Min.) 3.3V/TTL(Logic 1: 2.0 V Min.) , 5V/TTL(Logic 1: 3.5 V Min.)	
OFF Voltage Level	1.8V/TTL(Logic 0: 0.65 V Max.) , 2.5V/TTL(Logic 0: 0.7 V Max.) 3.3V/TTL(Logic 0: 0.8 V Max.) , 5V/TTL(Logic 0: 1.5 V Max.)	
Response Speed	1 MHz (Typical)	
Trigger Mode	Software (Pattern Match, Change of Status)	
Data Transfer	Polling, Interrupt	
Digital Output		
Channels	96 (Bi-Direction)	128 (Bi-Direction)
Type	1.8 V/TTL, 2.5 V/TTL , 3.3 V/TTL, 5 V/TTL	
Sink/Source (NPN/PNP)	Sink: 6 mA @ 0.33 V , Source: 6 mA @ 4.77 V	
Operation Mode	Static update, Waveform generation	
Load Voltage	1.8V/TTL(Logic 0: 0.65 V Max. ,Logic 1: 1.2 V Min.) , 2.5V/TTL(Logic 0: 0.7 V Max. ,Logic 1: 1.7 V Min.) 3.3V/TTL(Logic 0: 0.8 V Max. ,Logic 1: 2.0 V Min.) , 5V/TTL(Logic 0: 1.5 V Max. ,Logic 1: 3.5 V Min.)	
Response Speed	1 MHz (Typical)	
PC Bus		
Type	3.3 V/5 V Universal PCI, 32-bit, 33 MHz	
Data Bus	32-bit	
Power		
Consumption	600 mA @ +5 V	760 mA @ +5 V
Mechanical		
Dimensions (mm)	105 x 129 x 22 (W x L x D)	
Environment		
Operating Temperature	0 ~ +60°C	
Storage Temperature	-20 ~ +70°C	
Humidity	5 ~ 85% RH, Non-condensing	

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Software

Drivers

- [x] 32/64-bit Windows 10/11

Sample Programs

- [x] DOS Lib and TC Demo
- [x] VB/VC/Delphi/VB.NET/C#.NET/VC.NET/LabVIEW/Python/MATLAB

Pin Assignments

Pin Assignment	Terminal No.		Pin Assignment
PA_00	01	51	PB_00
PA_01	02	52	PB_01
PA_02	03	53	PB_02
PA_03	04	54	PB_03
PA_04	05	55	PB_04
PA_05	06	56	PB_05
PA_06	07	57	PB_06
PA_07	08	58	PB_07
PA_08	09	59	PB_08
PA_09	10	60	PB_09
PA_10	11	61	PB_10
PA_11	12	62	PB_11
PA_12	13	63	PB_12
PA_13	14	64	PB_13
PA_14	15	65	PB_14
PA_15	16	66	PB_15
PA_16	17	67	PB_16
PA_17	18	68	PB_17
PA_18	19	69	PB_18
PA_19	20	70	PB_19
PA_20	21	71	PB_20
PA_21	22	72	PB_21
PA_22	23	73	PB_22
PA_23	24	74	PB_23
GND	25	75	GND
PA_24	26	76	PB_24
PA_25	27	77	PB_25
PA_26	28	78	PB_26
PA_27	29	79	PB_27
PA_28	30	80	PB_28
PA_29	31	81	PB_29
PA_30	32	82	PB_30
PA_31	33	83	PB_31
PC_00	34	84	PC_16
PC_01	35	85	PC_17
PC_02	36	86	PC_18
PC_03	37	87	PC_19
PC_04	38	88	PC_20
PC_05	39	89	PC_21
PC_06	40	90	PC_22
PC_07	41	91	PC_23
PC_08	42	92	PC_24
PC_09	43	93	PC_25
PC_10	44	94	PC_26
PC_11	45	95	PC_27
PC_12	46	96	PC_28
PC_13	47	97	PC_29
PC_14	48	98	PC_30
PC_15	49	99	PC_31
VCC	50	100	VCC



CON1

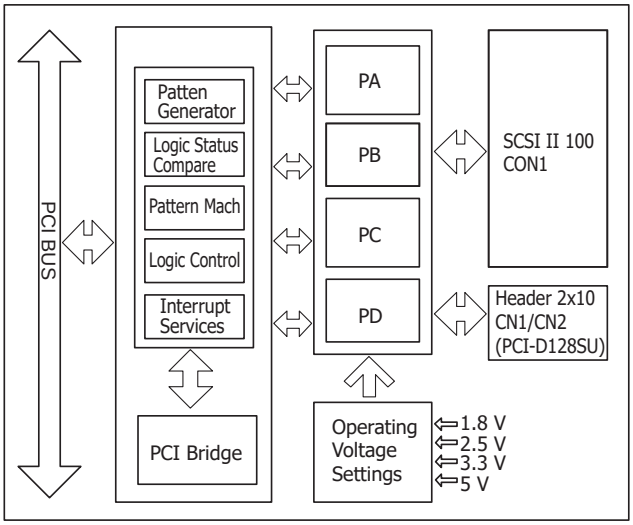
Pin Assignment	Terminal No.		Pin Assignment
PD_00	01	02	PD_08
PD_01	03	04	PD_09
PD_02	05	06	PD_10
PD_03	07	08	PD_11
PD_04	09	10	PD_12
PD_05	11	12	PD_13
PD_06	13	14	PD_14
PD_07	15	16	PD_15
GND	17	18	GND
VCC	19	20	--

CN1(PCI-D128SU only)

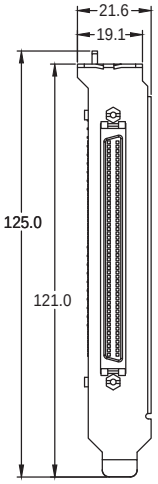
Pin Assignment	Terminal No.		Pin Assignment
PD_16	01	02	PD_24
PD_17	03	04	PD_25
PD_18	05	06	PD_26
PD_19	07	08	PD_27
PD_20	09	10	PD_28
PD_21	10	12	PD_29
PD_22	12	14	PD_30
PD_23	14	16	PD_31
GND	16	18	GND
VCC	18	20	--

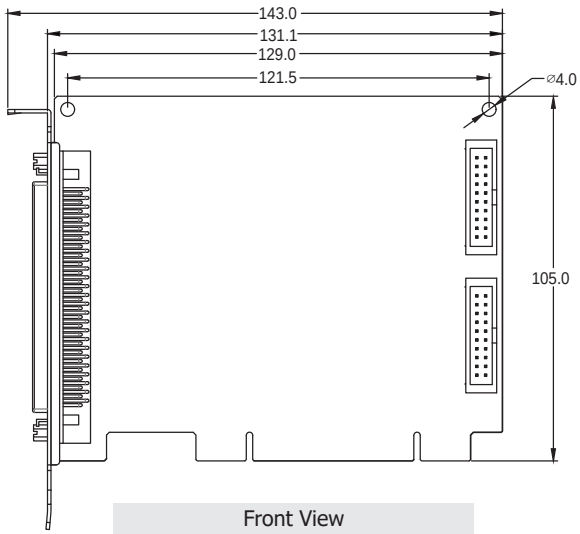
CN2(PCI-D128SU only)

Block Diagram

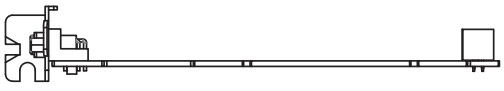


Dimensions (Units: mm)





Front View



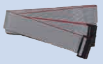
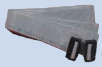
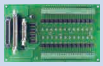
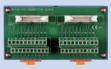
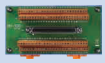
Bottom View

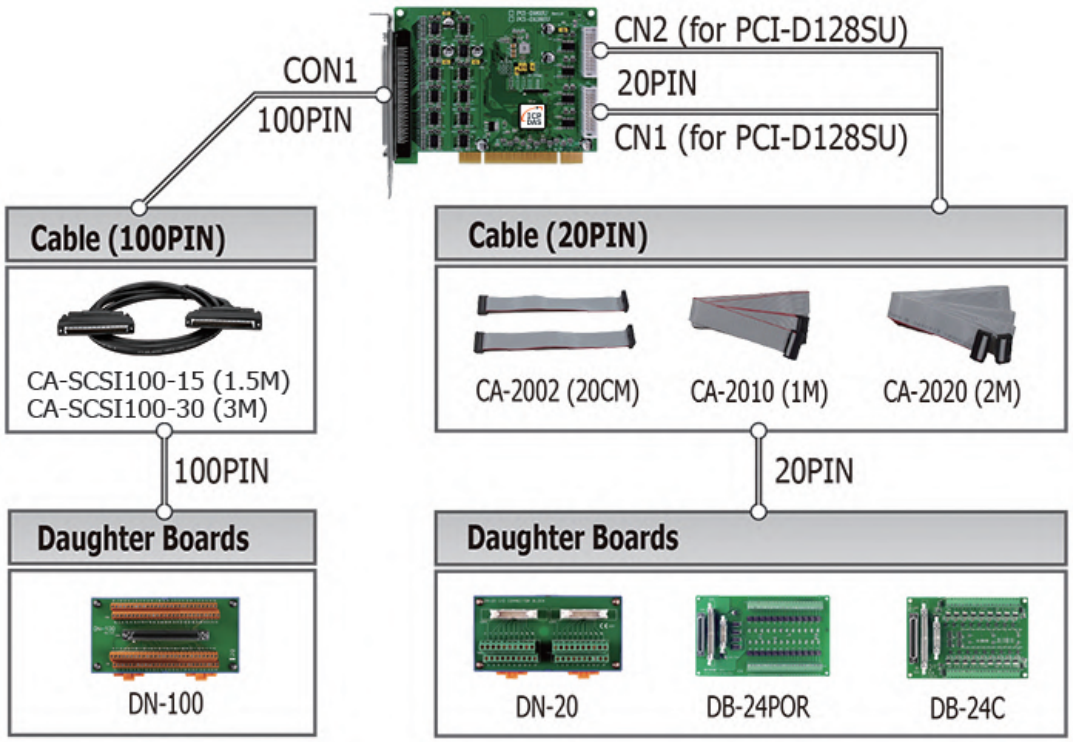
Ordering Information

PCI-D96SU CR	Universal PCI, 96-ch, 32-bit Digital I/O Board (RoHS)
PCI-D128SU CR	Universal PCI, 128-ch, 32-bit Digital I/O Board (RoHS)

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Accessories

 CA-2002 CR	20-pin flat cable, 20 cm x 2 (RoHS)
 CA-2010 CR	20-pin flat cable, 1 M (RoHS)
 CA-2020 CR	20-pin flat cable, 2 M (RoHS)
 CA-SCSI100-15 CR	SCSI II 100-pin & 100-pin Male connector cable 1.5 M (RoHS)
 CA-SCSI100-30 CR	SCSI II 100-pin & 100-pin Male connector cable 3 M (RoHS)
 DB-24C CR	24-channel of open-collector output board (RoHS)
 DB-24POR CR	24-channel of PhotoMos Relay output board (RoHS)
 DN-20 CR	Two 20-pin header DIN-rail terminal board (RoHS)
 DN-100 CR	I/O Connector Block with DIN-Rail Mounting and 100-Pin SCSI II Connector (RoHS)



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