



## e-D96S

High Speed Bi-directional DIO Module, 96-channel,  
SCSI II 96-pin connector

### Features

- 96 channels of Digital I/O
- Bi-direction programmable I/O ports under software control
- 3/4 32-bit bi-direction I/O ports
- DIO operating voltage: +1.8 V, +2.5 V, +3.3 V, +5 V
- Pull-high/Pull-low Jumpers for DI channels
- Digital Pattern Generator for DO channels
- Pattern-matching and change state Interrupt monitoring
- Supports a High-density SCSI II 100-pin Connector



### Introduction

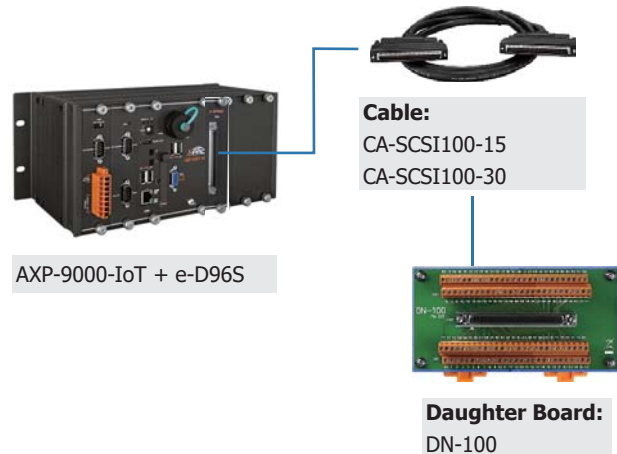
The e-D96S is an e-Bus x 1 (similar to PCI-E x1) module that provides 96 Digital I/O lines that consist of three 32-bit bi-directional ports for use in a variety of Digital I/O applications. Each channel could be setting for Digital Input or Output. They provide a variety of operating voltage (+1.8 V, +2.5 V, +3.3 V and +5 V) for customers need. This module needs to be installed on an e-Bus x1 slot of the AXP-9000-IoT Programmable Automation Controller (PAC).

The pull-high/low jumpers on e-D96S module allow the DI status to be predefined instead of remaining floating if the DI channels are disconnected or interrupted. The e-D96S provides a single high-density connector that reduces the amount of installation space required for the card in the computer.

The module installed on AXP-90000 with 64-bit Windows 10 IoT OS supports DLL SDK and Active X control together with various language sample programs based on Visual C++, Visual Basic, C#.NET, Visual Basic.NET and LabVIEW are provided in order to help users quickly and easily develop their own applications.

### System Specifications

System	
Type	e-Busx1
Data Bus	32-bit
Hardware	
Connector	Female SCSI II 100-pin x 1
Software	
SDK	LabVIEW Demo, VB/VC/Delphi/BCB/ VB.NET/C#.NET/VC.NET/MATLAB Demo
LED Display	
System LED Indicator	1 LED as Power Indicator
Power	
Consumption	600 mA @ +5 V
Mechanical	
Dimensions (W x L x H)	31 mm x 134 mm x 136 mm
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-40 ~ +85 °C
Humidity	5 ~ 85 % RH, Non-condensing



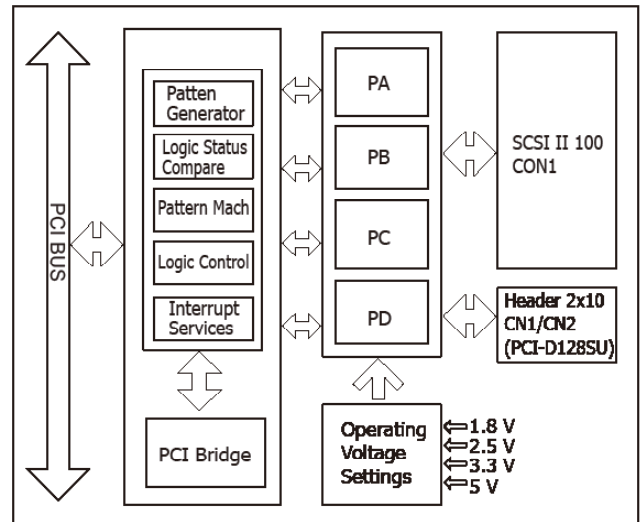
### I/O Specifications

Digital Input	
Channels	96 (Bi-Direction)
Type	1.8 V/TTL, 2.5 V/TTL, 3.3 V/TTL, 5 V/TTL
Resolution	24-bit
Accuracy	0.05% of FSR ±1 LSB @ 25 °C, ±10 V
Sampling Rate	15 kS/s
Input Impedance	10,000 MΩ/4 pF
Overvoltage Protection	Continuous ±35 Vp-p
FIFO Size	2048 Samples
Trigger Mode	Software
Data Transfer	Polling、Interrupt
Drift	±50 ppm/°C

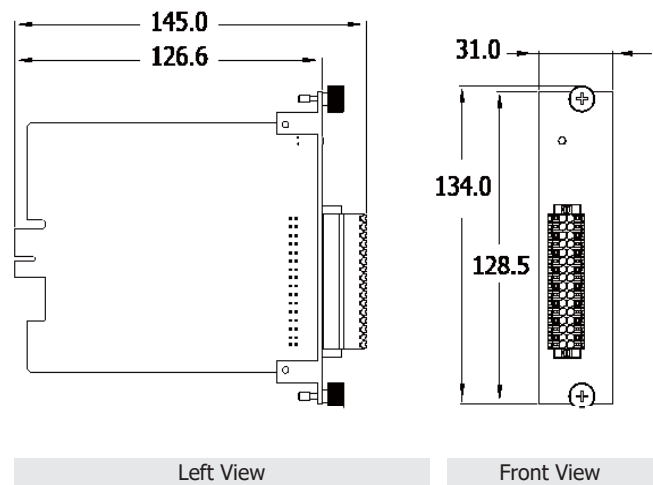
## Pin Assignments

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

## Pin Assignments



## Dimensions (Units: mm)



## Accessories

CA-SCSI100-15 CR	SCSI-II 100-pin Cable, 1.5M (RoHS)
CA-SCSI100-30 CR	SCSI-II 100-pin Cable, 3M (RoHS)
DN-100 CR	100-pin SCSI II Female I/O Connector Block (Pitch= 3.81 mm) (RoHS)

## Ordering Information

<b>e-D96S CR</b>	High Speed Bi-directional DIO Module, 96-channel, SCSI II 96-pin connector (RoHS)
------------------	---