

Description

The AD2B adapter allows the RS-485-like signal of SEI devices to interface to a standard RS-232 port (9-pin DB), such as those in IBM compatible PCs. The SEI (Serial Encoder Interface) bus is a simple, quick and convenient network of SEI devices interfacing to a RS-232 serial port. The SEI bus supports from 1 to 15 devices on a single 6-wire telephone-type cable, up to 1000 feet long. For more information on the SEI bus please see the SEI page.

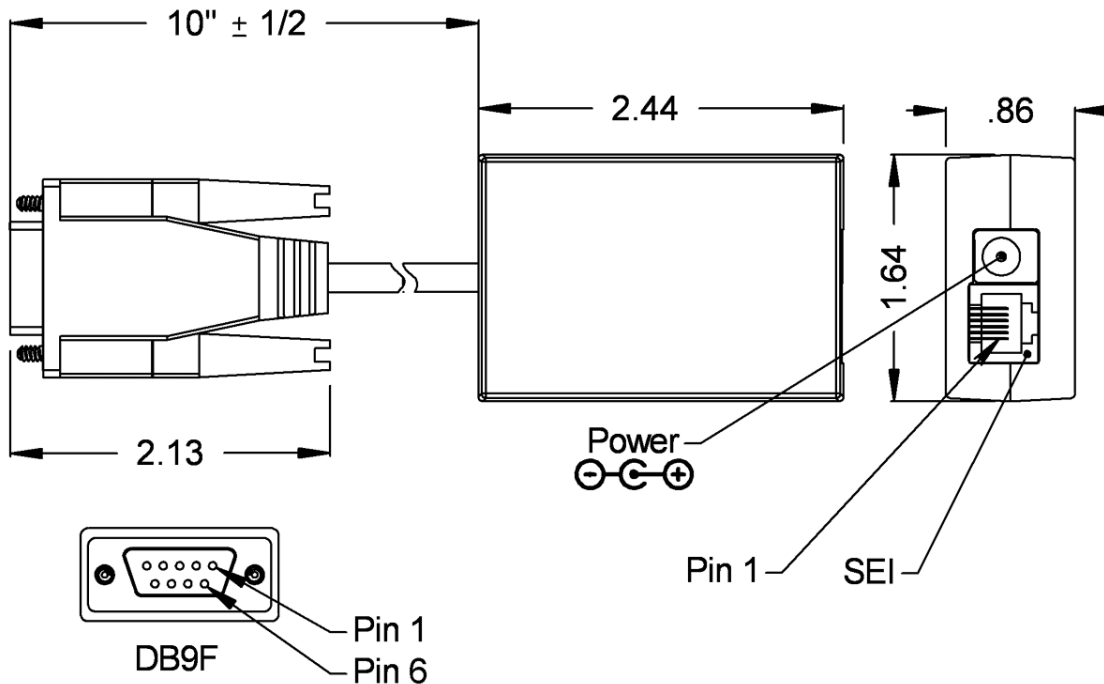
The AD2B has 2 differential signals to interface to SEI devices: the bidirectional data pair for communication, and the busy input pair for data flow control. The PS-12 power supply connects to the AD2B and furnishes power for all SEI devices on the bus.



Software

- ▶ www.usdigital.com/support/software/sei
- ▶ www.usdigital.com/assets/USDProducts.zip (.zip file with installer)

Mechanical Drawing



Electrical

Specifications apply over entire operating temperature range.

Parameter	Min.	Typ.	Max.	Units	Notes
Supply Voltage	8.0	-	16	Volts	-
Supply Current (without encoders)	-	-	15	mA	-
Differential SEI Output voltage DataL - DataH , Busy+ - Busy-	2.0	2.75	5.0	Volts	Load = 100 Ω
Differential SEI Input Voltage DataL - DataH , Busy+ - Busy-	0.2	-	5.0	Volts	-
Common Mode SEI Output Voltage (DataH + DataL)/2, (Busy- + Busy+)/2	2.0	2.5	3.0	Volts	Load = 100 Ω
Common Mode SEI Input Voltage (DataH + DataL)/2, (Busy- + Busy+)/2	-4.5	-	3.0	Volts	-
Input current DataH, DataL, Busy-, Busy+	-15	-	15	mA	In = 0 to 5V
RS-232 Output	± 5.0	± 8.0	-	Volts	-
RS-232 Input	± 3.5	-	± 15	Volts	-
RS-232 Input Resistance	3	5	7	k Ω	-

Absolute Maximum Ratings

Parameter	Min.	Max.	Units
Storage Temperature	-40	100	C
Operating Temperature	0	70	C
Humidity (non-condensing)	0	95	%

Functional Pin Descriptions

MOD6:

Pin	Name	Description
1	GND	Ground, common for power, data and busy pairs.
2	Busy+	Differential input line, active high, has 330 Ω pull down.
3	Busy-	Differential input line, active low, has 330 Ω pull up.
4	PWR	Power supply output to encoder bus.
5	DataL	Bidirectional differential data line, has 330 Ω pull up.
6	DataH	Bidirectional differential data line, has 330 Ω pull down.

DB9F:

Pin	Name	Description
3	RXD	Data input from host, normally low.
2	TXD	Data output to host, normally low.
7	RTS	Not connected.
8	CTS	Busy line to host, active low.
5	GND	Ground, common for RS232 signals.

 **Included Accessories**

PS-12 Power supply

Software

 **Product Change Notifications**

Title	Date	Description	Download
PCN 1011	9/21/2011	The AD2B, AD4B, AD7, EADAPT, EDAC2, EDIVIDE, EPOT, EQUAD, ESUM, ESWITCH, ETACH2, SEI-USB, USB-232 currently utilizes a printed thermal transfer label. This label will no longer be used and will be replaced by laser marking directly onto the housing of the product. The purpose for this change is to create a more durable solution, and eliminate the possibility of the label being inadvertently removed from the housing.	Download

Base Pricing

Quantity	Price
1	\$89.93
10	\$73.88

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