
TIP866-IO-10

DIN Rail Mounting I/O Module for TIP866/TIP867 with 8 DB9 Connectors

Version 1.0 Revision A

User Manual

Issue 1.3

September 2006

D75866880

TEWS TECHNOLOGIES GmbH

Am Bahnhof 7
25469 Halstenbek, Germany
www.tews.com

Phone: +49-(0)4101-4058-0
Fax: +49-(0)4101-4058-19
e-mail: info@tews.com

TEWS TECHNOLOGIES LLC

9190 Double Diamond Parkway,
Suite 127, Reno, NV 89521, USA
www.tews.com

Phone: +1 (775) 850 5830
Fax: +1 (775) 201 0347
e-mail: usasales@tews.com

TIP866-IO-10

DIN Rail Mounting I/O Module for TIP866 and TIP867 with 8 DB9 Connectors

This document contains information, which is proprietary to TEWS TECHNOLOGIES GmbH. Any reproduction without written permission is forbidden.

TEWS TECHNOLOGIES GmbH has made any effort to ensure that this manual is accurate and complete. However TEWS TECHNOLOGIES GmbH reserves the right to change the product described in this document at any time without notice.

TEWS TECHNOLOGIES GmbH is not liable for any damage arising out of the application or use of the device described herein.

Style Conventions

Hexadecimal characters are specified with prefix 0x, i.e. 0x029E (that means hexadecimal value 029E).

For signals on hardware products, an 'Active Low' is represented by the signal name with # following, i.e. IP_RESET#.

©1999-2006 by TEWS TECHNOLOGIES GmbH

IndustryPack is a registered trademark of SBS Technologies, Inc

Issue	Description	Date
1.0	First Issue	August 1999
1.1	Add cable TA106-10	June 2002
1.2	Corrections for TIP867 Pin Assignment	November 2004
1.3	New address TEWS LLC	September 2006

Table of Contents

1	PRODUCT DESCRIPTION.....	6
2	TECHNICAL SPECIFICATION.....	7
3	CONNECTOR X1 PIN ASSIGNMENT.....	8
4	DB9 PIN ASSIGNMENT.....	10
5	ASSEMBLY DRAWING.....	11

Table of Figures

FIGURE 2-1 : TECHNICAL SPECIFICATION.....	7
FIGURE 3-1 : CONNECTOR X1 PIN ASSIGNMENT	9
FIGURE 4-1 : PIN ASSIGNMENT OF DB9 MALE CONNECTOR TIP866-IO-10 CHANNEL 1 AND 2.....	10
FIGURE 4-2 : PIN ASSIGNMENT OF DB9 MALE CONNECTOR TIP866-IO-10 CHANNEL 3 TO 8	10
FIGURE 5-1 : ASSEMBLY DRAWING.....	11

1 Product Description

The TIP866-IO-10 is a complete interface solution for the TIP866-10 (8 serial channels RS232), the TIP866-20 (8 serial channels RS422), and the TIP867-10 (8 serial channels RS485). The TIP866-IO-10 comes with one cable TA106-10 (0.8m ribbon cable with 50 pin ribbon cable connectors).

The 8 serial ports of the TIP866-10/-20 or the TIP867-10 are routed to 8 DB9 connectors located on the TIP866-IO-10.

TXD, RXD, RTS, CTS and GND are supported for each of the 8 serial channels of the TIP866-10 (RS232). Additionally DCD, DTR, RI and DSR are supported for channel 1 and 2.

TXD+/-, RXD+/- and GND are supported for the TIP866-20 (RS422) and DX+/- and GND are supported for the TIP867-10 (RS485).

The TIP866-IO-10 is designed for DIN rail mounting.

This I/O module can also be used with the IP-Octals. Please note that the IP-Octal RS232 does not support DCD, DTR, RI and DSR on serial channel 1 and 2.

2 Technical Specification

Board Size	95 mm x 83 mm
Interface to serial lines	8 DB9 male connectors
Interface to IP	Connector for 50 conductor flat cable
Cable	TA106-10 (0.8 m ribbon cable with two 50 pin ribbon cable connectors)
Shield	One terminal provides shield connection to all 8 DB9 connectors
Mounting	DIN rail mounting

Figure 2-1 : Technical Specification

3 Connector X1 Pin Assignment

X1 Pin	TIP866-10 (RS232)	TIP866-20 (RS422)	TIP867-10 (RS485)
1	GND	GND	GND
2	TXD1	TXD1-	DX1-
3	RXD1	TXD1+	DX1+
4	RTS1	RXD1-	nc
5	CTS1	RXD1+	nc
6	GND	GND	GND
7	TXD2	TXD2-	DX2-
8	RXD2	TXD2+	DX2+
9	RTS2	RXD2-	nc
10	CTS2	RXD2+	nc
11	GND	GND	GND
12	TXD3	TXD3-	DX3-
13	RXD3	TXD3+	DX3+
14	RTS3	RXD3-	nc
15	CTS3	RXD3+	nc
16	GND	GND	GND
17	TXD4	TXD4-	DX4-
18	RXD4	TXD4+	DX4+
19	RTS4	RXD4-	nc
20	CTS4	RXD4+	nc
21	GND	GND	GND
22	TXD5	TXD5-	DX5-
23	RXD5	TXD5+	DX5+
24	RTS5	RXD5-	nc
25	CTS5	RXD5+	nc
26	GND	GND	GND
27	TXD6	TXD6-	DX6-
28	RXD6	TXD6+	DX6+
29	RTS6	RXD6-	nc
30	CTS6	RXD6+	nc
31	GND	GND	GND
32	TXD7	TXD7-	DX7-
33	RXD7	TXD7+	DX7+
34	RTS7	RXD7-	nc
35	CTS7	RXD7+	nc
36	GND	GND	GND
37	TXD8	TXD8-	DX8-
38	RXD8	TXD8+	DX8+
39	RTS8	RXD8-	nc

X1 Pin	TIP866-10 (RS232)	TIP866-20 (RS422)	TIP867-10 (RS485)
40	CTS8	RXD8+	nc
41	GND	GND	GND
42	nc	nc	nc
43	DCD1	nc	nc
44	DTR1	nc	nc
45	RI1	nc	nc
46	DSR1	nc	nc
47	DCD2	nc	nc
48	DTR2	nc	nc
49	RI2	nc	nc
50	DSR2	nc	nc

nc = not connected on the TIP866-IO-10

Figure 3-1 : Connector X1 Pin Assignment

4 DB9 Pin Assignment

Pin No. DB9	RS232 (TIP866-10)	RS422 (TIP866-20)	RS485 (TIP867-10)
1	DCD		
2	RXD	TXD+	DX+
3	TXD	TXD-	DX-
4	DTR		
5	GND	GND	GND
6	DSR		
7	RTS	RXD-	
8	CTS	RXD+	
9	RI		

Figure 4-1 : Pin Assignment of DB9 Male Connector TIP866-IO-10 Channel 1 and 2

Pin No. DB9	RS232 (TIP866-10)	RS422 (TIP866-20)	RS485 (TIP867-10)
1			
2	RXD	TXD+	DX+
3	TXD	TXD-	DX-
4			
5	GND	GND	GND
6			
7	RTS	RXD-	
8	CTS	RXD+	
9			

Figure 4-2 : Pin Assignment of DB9 Male Connector TIP866-IO-10 Channel 3 to 8

Channel 1 and 2 of the TIP866-IO-10 additionally support DCD, DTR, RI and DSR for the TIP866-10.

5 Assembly Drawing

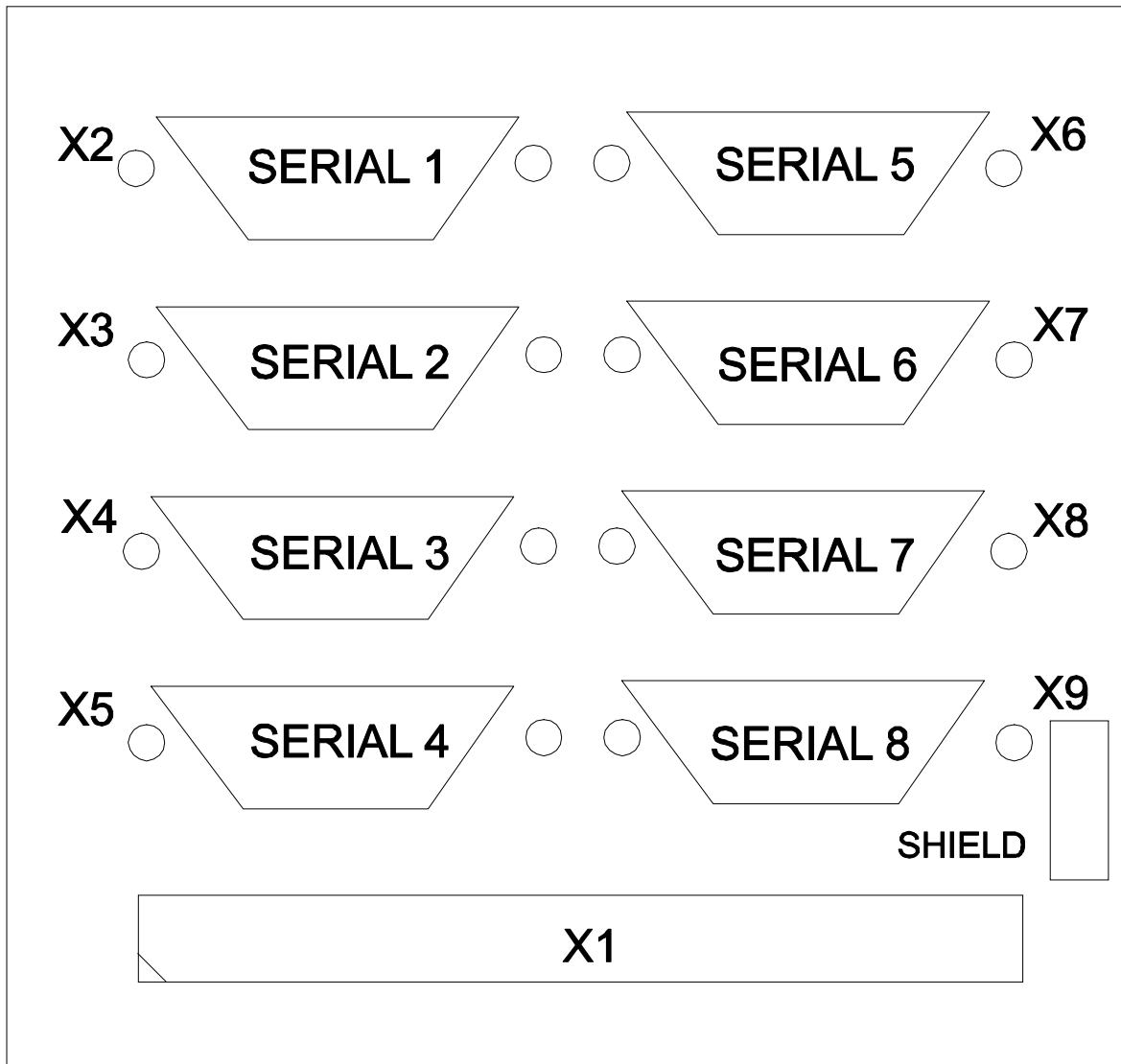


Figure 5-1 : Assembly Drawing