

Data Sheet

<p>DP-34044-2-000</p> <p>xtremeDB</p> <p>xDB16-ADI</p> <p>Molded Plastic</p> <p>Input Module Digital and Analog</p> <p>J1939</p> <p>8...32 V DC</p>	<p>Technical drawing showing dimensions for the DP-34044-2-000 input module. Dimensions include: overall width 8.07 [205], overall height 3.80 [97], mounting hole offset .30 [8], mounting hole diameter .20 [5], pin pitch 10.43 [265], connector offset 1.28 [33], and bottom thickness .06 [2]. Connector types DT06-4S and DT16-18SA-K004 are indicated.</p>
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Technical Data

<i>Housing</i>	Molded glass filled nylon
<i>Dimensions (l x w x h)</i>	3.80 x 10.43 x 1.34 in (97 x 265 x 34 mm)
<i>Weight</i>	1.5 lbs (0.68 kg)
<i>Installation (mounting hardware not included)</i>	Screw: 3 x #10 (3 x M5) Torque: 21 in-lbs (2.4 Nm) max.
<i>Mating Connectors and Accessories</i> <i>Operating Voltage, Ground, and Configuration</i> <i>I/O-Ports</i>	18 Pole Plug DT16-18SA or equivalent 4 Pole Plug 10 x DT06-4S or equivalent
<i>DEUTSCH® size 16 Socket</i>	0462-201-16141
<i>DEUTSCH® Seal Plug</i>	0462-16-0122 114017
<i>Cable Length</i>	98.4 ft (30 m) max.
<i>Operating Voltage</i>	8...32 V DC protected against reverse polarity
<i>Operating Current</i>	13 Amps continuous per pin max. 13 Amps node current max.
<i>Communication Interface and Baud Rate</i>	2 non-isolated J1939 ports 250kb (default) & 500kb
<i>Source Address</i>	Base Address 224d (0xE0h) Offset 0...15 (J0: CNFGx-A/B)
<i>Total Inputs</i>	16
<i>Inputs Diagnostics</i>	Over voltage and sensor power overcurrent
<i>Output (sensor power)</i>	1 Amp max.
<i>Operating Temperature</i>	-40...80 °C
<i>Storage Temperature</i>	-40...85 °C
<i>Protection Class</i>	IP67: Connector seal plugs required for unused pins. Sealing plugs required for unused ports. IP68/IP69K: Using Murrelektronik MDC xtreme cables.

h	DCN F750	09.09.21	FSa		Date	Name	<p>Data Sheet</p> <p>xtremeDB Input Module J1939 xDB16-ADI</p>	
g	DCN F715	07.14.21	FSa	Originator	09.09.16	JNa		
f	DCN F363	08.11.20	FSa	Approved	09.21.16	KGu		
e	DCN F257	04.07.20	FSa					
d	DCN F208	03.13.20	FSa	<p>A Murrelektronik Company</p>			<p>Art. No.: DP-34044-2-000</p>	
Rev.	Description	Date	Name					Sheet
a	Initial release	09.09.16	JNa	DP-34044-2-000_db_e_h.docx				1 of 5
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Characteristics of the Input Ports


Inputs Digital Port1: B, A Port2: B, A Port3: B, A Port4: B, A Port5: B, A Port6: B, A Port7: B, A Port8: B, A	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Positive switching</td> <td style="padding: 2px;">>0.8 V DC</td> </tr> <tr> <td style="padding: 2px;">Ground switching</td> <td style="padding: 2px;"><0.3 V DC</td> </tr> <tr> <td style="padding: 2px;">Input resistance</td> <td style="padding: 2px;">Positive 10 kΩ Ground 470 kΩ</td> </tr> <tr> <td style="padding: 2px;">Input response</td> <td style="padding: 2px;">20 mSec</td> </tr> <tr> <td colspan="2" style="text-align: center;">-----</td> </tr> <tr> <td colspan="2" style="padding: 2px;">Counter/Encoder Input</td> </tr> <tr> <td colspan="2" style="padding: 2px;">Port7 A & Port8 A</td> </tr> <tr> <td style="padding: 2px;">Positive switching</td> <td style="padding: 2px;">>0.8 V DC</td> </tr> <tr> <td style="padding: 2px;">Frequency</td> <td style="padding: 2px;">0-5000 Hz</td> </tr> <tr> <td style="padding: 2px;">Default configuration</td> <td style="padding: 2px;">Positive switching</td> </tr> </table>	Positive switching	>0.8 V DC	Ground switching	<0.3 V DC	Input resistance	Positive 10 kΩ Ground 470 kΩ	Input response	20 mSec	-----		Counter/Encoder Input		Port7 A & Port8 A		Positive switching	>0.8 V DC	Frequency	0-5000 Hz	Default configuration	Positive switching																		
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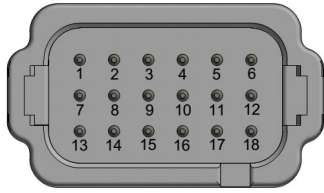
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Operating States (LEDs)	Color	Status
PWR	Blue	Module and Ports power are connected
COM & STAT	Green	Module and Communication status
FLT	Red	Fault Status
IN	Yellow	Left LED – Input A Right LED – Input B

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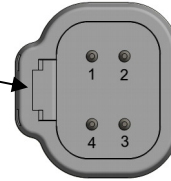
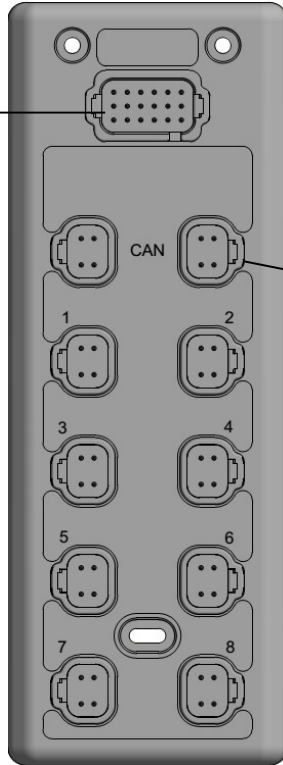
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Connector Interface



Connections J0:

1. BAUD1-A
2. CNFG1-A
3. CNFG2-A
4. CNFG3-A
5. CNFG4-A
6. NC
7. BAUD1-B
8. CNFG1-B
9. CNFG2-B
10. CNFG3-B
11. CNFG4-B
12. NC
13. NC
14. NC
15. NC
16. NC
17. NC
18. NC




Connections:

CAN Port 1 and 2

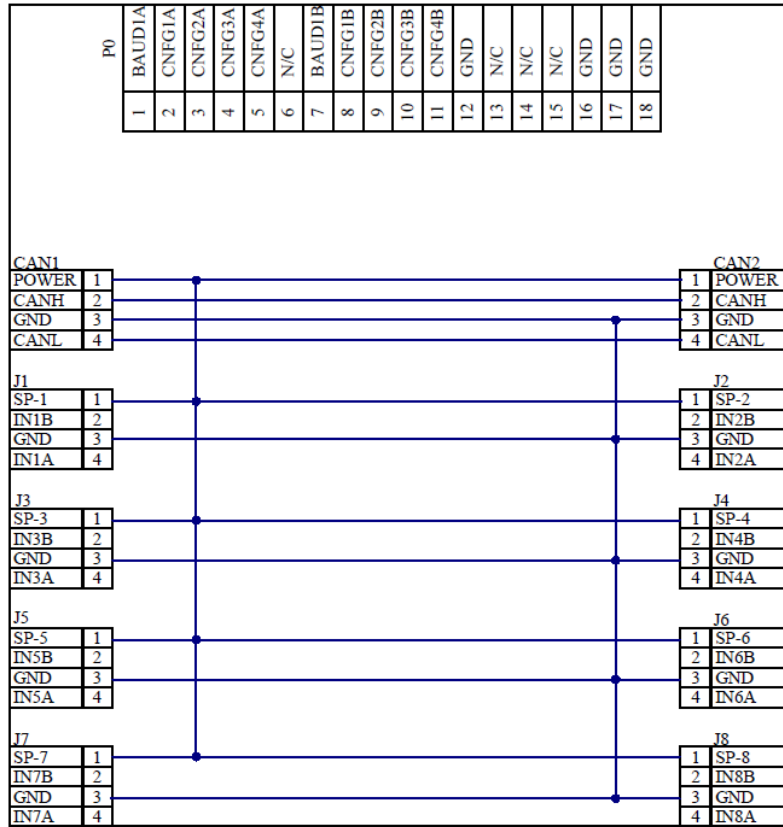
- Pin 1 = POWER
- Pin 2 = CAN HIGH
- Pin 3 = GROUND A
- Pin 4 = CAN LOW

INPUT Ports 1 to 8

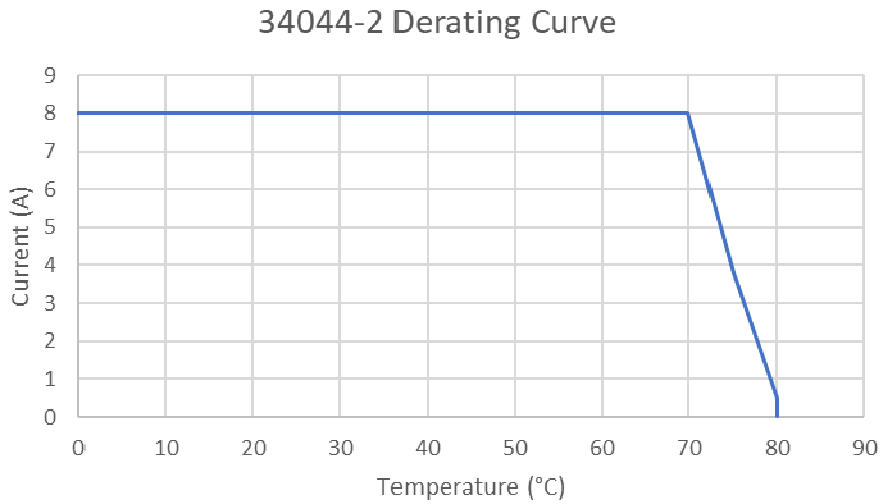
- Pin 1 = SENSOR POWER
- Pin 2 = INPUT B
- Pin 3 = GROUND A
- Pin 4 = INPUT A


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DP-34044-2-XXX I/O Diagram



Derating Curve Max Total Current



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Test Standards and Regulation

<i>Climatic test</i>	<i>Cold Temperature to IEC 60068-2-1:2007, test Ad</i> <i>Dry Heat to IEC 60068-2-2:2007, test Bb</i> <i>Temperature Durability to IEC 60068-2-14:2000-08, test Nb</i> <i>Temperature Shock to IEC 60068-2-14:2000-08, test Na</i> <i>Humidity Soak to IEC 60068-2-78:2001, test Cab</i> <i>Humidity Cycle to IEC 60068-2-30:2005, test Db</i>
<i>Mechanical test</i>	<i>Swept Sine Vibration to IEC 60068-2-6:2007, test Fc</i> <i>Random Vibration to IEC 60068-2-64:2008, test Fh</i> <i>Resonance Vibration to IEC 60068-2-6:2007, Section 8.1</i> <i>Mechanical Shock to EN 60068-2-27:2008, test Ea</i> <i>Mechanical Bump to EN 60068-2-27:2008, test Ec</i> <i>IP protection to EN 60529:2000-09, test IP67, IP68, IP69K</i> <i>Chemical Loads to ISO 16750-5:2010 Part 5: AA, BA, BC, BD, BE, CC, DB, DD</i>
<i>Electrical test</i>	<i>Electrical Tests to ISO 16750-2:2012</i> <i>EMC Immunity to ISO 13766-1:2018, ISO 13766-2:2018, ISO 13309:2010</i> <i>EMC Emissions to ISO 13766-1:2018, ISO 13766-2:2018, ISO 13309:2010</i> <i>Conducted Transients to ISO 13766-1:2018, ISO 13766-2:2018, ISO7637-2:2011, Annex A</i>

Article Numbers

DP-34044-2-000	J1939 Slave Module
DP-34044-2-200	CANopen Slave module



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