

Data Sheet

<p>DP-34044-3-000</p> <p><i>xtremeDB</i></p> <p><i>xDB16-PWM</i></p> <p>Molded Plastic</p> <p>Output Module <i>Digital, PWM, and PWM(i)</i></p> <p>J1939</p> <p>8...32 V DC</p>	<p>Technical drawing showing dimensions for the DP-34044-3-000 module. Dimensions include: 8.07 [205] (total width), 3.80 [97] (height), 2.05 [52] (right side height), 10.43 [265] (width between connectors), 1.26 [33] (thickness), 0.30 [8] (top edge offset), 0.20 [5] (bottom edge offset), 0.22 [6] (hole diameter), and 0.06 [2] (bottom edge offset).</p>
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Technical Data

<i>Housing</i>	<i>Molded glass filled nylon</i>
<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 (16 – 20 AWG) 1062-16-0122 (14 – 18 AWG) 114017
<i>DEUTSCH® Seal Plug</i>	
<i>Maximum 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. 52 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 Outputs</i>	16 (14 PWM/PWM(i) 4 Amps and 2 Digital x 10 Amps)
<i>Outputs Diagnostics</i>	Short circuit and Overcurrent
<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.

e	DCN 6022	08.28.23	AH		Date	Name	<p>Data Sheet</p> <p>xtremeDB IO Module J1939 xDB16-PWM</p>
d	DCN F750	09.09.21	FSa	Originator	01.18.17	JNa	
d	DCN F715	07.14.21	FSa	Approved	02.10.17	KGu	
c	DCN F257	04.07.20	FSa	<p>A Murrelektronik Company</p>			
b	DCN F208	03.13.20	FSa				<p>Art. No.: DP-34044-3-000</p>
Rev.	Description	Date	Name				
a	Initial release	02.10.17	JNa				
							<p>The trademark DEUTSCH is owned by the TE Connectivity Ltd. family of companies.</p>
							<p>Sheet 1 of 5</p>

Characteristics of the Output Ports

Outputs

Digital Output
 Output voltage 8...32 V DC
 Switching current 4 Amps
 10 Amps (Port1A Pin-4)
 10 Amps (Port3A Pin-4)

PWM & PWM(i) Current Controlled Output
 PWM frequency 40-1100 Hz
 PWM(i) frequency 100-700 Hz
 Switching current 4 Amps


Default configuration Digital 4 Amps

Operating States (LEDs)

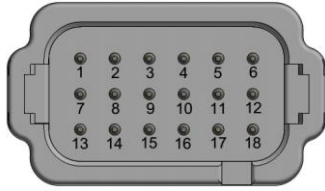
Color

Status

<i>PWR</i>	<i>Blue</i>	<i>Module and Ports power are connected</i>
<i>COM & STAT</i>	<i>Green</i>	<i>Module and Communication status</i>
<i>FLT</i>	<i>Red</i>	<i>Fault Status</i>
<i>P1 – P4</i>	<i>Blue</i>	<i>Bus Power (Port Output Power)</i>
<i>OUT</i>	<i>Yellow</i>	<i>Left LED – Output A Right LED – Output B</i>

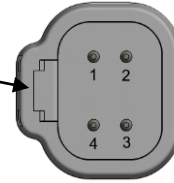
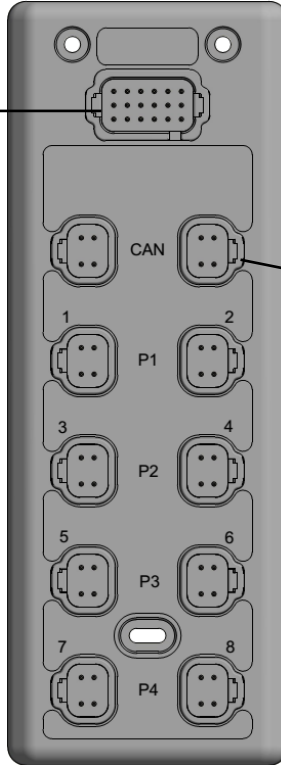
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Connector Interface



Connections J0:

1. BAUD1-A
2. CNFG1-A
3. CNFG2-A
4. CNFG3-A
5. CNFG4-A
6. BATTERY P4
7. BAUD1-B
8. CNFG1-B
9. CNFG2-B
10. CNFG3-B
11. CNFG4-B
12. GROUND B
13. BATTERY P1
14. BATTERY P2
15. BATTERY P3
16. GROUND B
17. GROUND B
18. GROUND B



Connections:

CAN Port 1 & 2


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

OUTPUT Ports 1 to 8

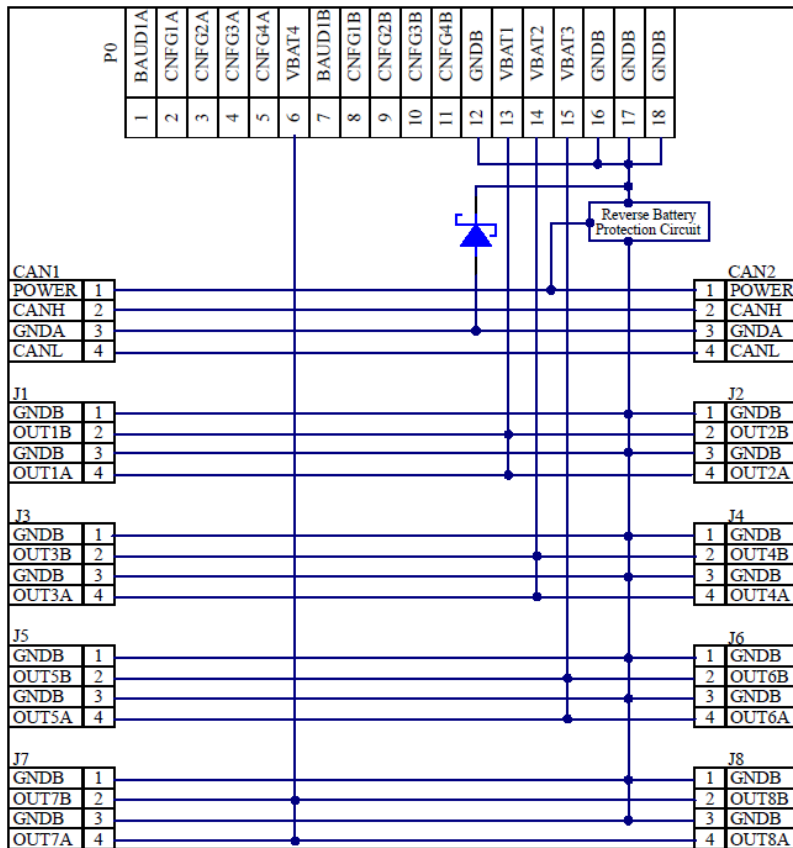
- Pin 1 = GROUND B
- Pin 2 = OUTPUT B
- Pin 3 = GROUND B
- Pin 4 = OUTPUT A



Proper installation and operation of the xtremeDB blocks requires the use of all ground connections. This includes Ground (A) for module power and Ground (B) for port power on the 18 pin configuration and power plug.

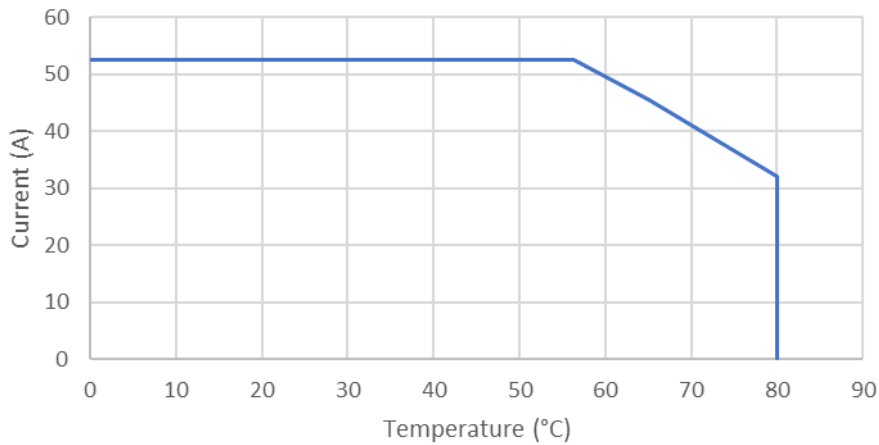
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DP-34044-3-XXX I/O Diagram



Derating Curve Max Total Current

Derating curve for 34044-3



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Test Standards and Regulation

<i>Climatic test</i>	<p><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></p>
<i>Mechanical test</i>	<p><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></p>
<i>Electrical test</i>	<p><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></p>
<i>CE</i>	<p><i>RoHS: Directive 2011/65/EU</i> <i>EMI/EMC: Directive 2014/30/EU</i></p>

Article Numbers

DP-34044-3-000	J1939 Slave Module
DP-34044-3-200	CANopen Slave module



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