

Data Sheet

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| <p>DP-34044-4-xxx</p> <p>xtremeDB</p> <p>xDB16-PWMI</p> <p>Molded Plastic</p> <p>Output Module Digital and PWM(i)</p> <p>J1939 / CANOpen</p> <p>8...32 Vdc</p> | |
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Technical Data

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| <i>Housing</i> | <i>Molded plastic</i> |
| <i>Dimensions (l x w x h)</i> | 3.80 x 10.43 x 1.34 inch (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>Connections</i> <i>Operating Voltage, Ground, and Configuration</i> <i>I/O Ports</i> | 18 Pole Socket DT16-18SA 4 Pole Socket 10 x DT06-4S |
| <i>Deutsch® size 20 Socket</i> | 0462-201-20141 |
| <i>Deutsch® size 16 Socket</i> | 0462-201-16141 |
| <i>Deutsch® Seal Plug</i> | 114017-ZX |
| <i>Operating Voltage</i> | 8-32 Vdc |
| <i>Operating Current</i> | 13.5 Amps continuous per pin max. 52 Amps node current max. |
| <i>Communication Interface and Baud Rate</i> | 2 non-isolated J1939 ports (250kb & 500kb) |
| <i>Node ID</i> | Base Source Address 224d (0xE0h) Offset 1-15 |
| <i>Total Outputs</i> | 16 (12 paired 4 Amps, 2 4 Amps, 2 10 Amps) |
| <i>Outputs Diagnostics</i> | Short circuit and Overcurrent |
| <i>Operating Temperature</i> | -40...80 °C |
| <i>Storage Temperature</i> | -45...85 °C |
| <i>IP67</i> | Connector seal plugs required for unused pins. Sealing plugs required for unused ports. |

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|------|-------------------|----------|------------|--|----------|------|---|-----------------------------------|
| | | | | | Date | Name | <p>Data Sheet</p> <p>xtremeDB PWM(i) Module xDB16-PWMI</p> | |
| | | | Originator | 08.09.16 | JNa | | | |
| d | DCN F208 | 03.13.20 | FSa | Approved | 09.21.16 | KGu | | |
| c | Details corrected | 10.26.16 | JNa | <p>A Murrelektronik Company</p> | | | | |
| b | Labels added | 10.14.16 | JNa | | | | <p>Art. No.: DP-34044-4-xxx</p> | <p><i>Sheet</i></p> <p>1 of 4</p> |
| Rev. | Description | Date | Name | | | | | |
| a | Initial release | 09.21.16 | JNa | DP-34044-4-xxx_db_e_d.docx | | | | |

Characteristics of the output ports

Outputs

Digital Output

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

PWM & PWM(i) Output


PWM frequency 40-1100 Hz
 PWM(i) frequency 100-700 Hz
 Switching current 4 Amps

Operating States (LEDs)

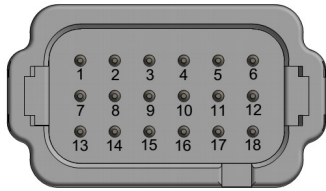
Color

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>OUT</i> | <i>Yellow</i> | <i>Left LED – Output A Right LED – Output B</i> |

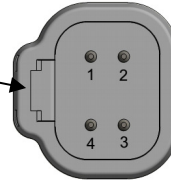
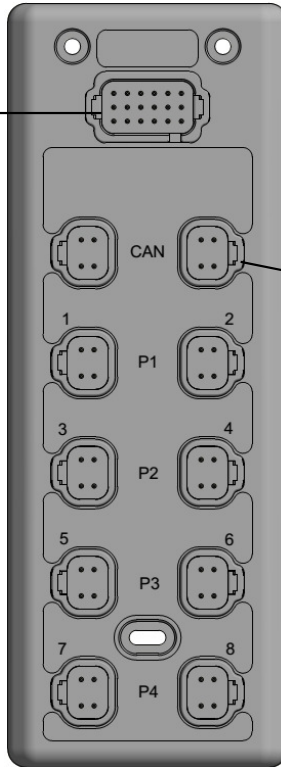
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| Rev. | Description | Date | Name | Art. No.: DP-34044-4-xxx | | | <i>Sheet</i> 2 of 4 | |
| a | Initial release | 09.21.16 | JNa | | | DP-34044-4-xxx_db_e_d.docx | | |

Connector Interface



Connections:

1. Baud 1-A
2. Config 1-A
3. Config 2-A
4. Config 3-A
5. Config 4-A
6. Power 4
7. Baud 1-B
8. Config 1-B
9. Config 2-B
10. Config 3-B
11. Config 4-B
12. Ground B
13. Power 1
14. Power 2
15. Power 3
16. Ground B
17. Ground B
18. Ground B




Connections:

- CAN Port 1 & 2**
 Pin 1 = 8 - 32V DC
 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

| | | | | Date | Name | Data Sheet | |
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| a | Initial release | 09.21.16 | JNa | | | | |


Test Standards and Regulation

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|------------------------|--|
| <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</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

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|----------------|----------------------|
| DP-34044-4-000 | J1939 Slave Module |
| DP-34044-4-200 | CANOpen Slave module |

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| | | | | Originator | 08.09.16 | JNa | | |
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| | | | | DP-34044-4-xxx_db_e_d.docx | | | | |