

## Data Sheet

<b>DP-34044-1-000</b>  <b>xtremeDB</b>  <b>xDB0808-DIO</b>  <b>Molded Plastic</b>  <b>I/O Module</b> <b>Digital and Analog</b>  <b>J1939</b>  <b>8...32 V DC</b>	<p>Technical drawing showing dimensions for the DP-34044-1-000 I/O module. Dimensions include: 8.07 [205] (width), 3.80 [97] (height), 2.05 [52] (height), 10.43 [265] (width), 1.28 [33] (height), .30 [8] (height), .20 [5] (width), 10.43 [265] (width), DT06-4S (connector), DT16-18SA-K004 (connector), Ø .22 [6] (hole diameter), and .06 [2] (height).</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 0462-16-0122 114017
<i>DEUTSCH® Seal Plug</i>	
<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. 26 Amps max node current
<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 and Outputs</i>	16 (8 Inputs & 8 x 4 A Outputs)
<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	<b>Data Sheet</b>  <b>xtremeDB IO Module J1939</b> <b>xDB0808-DIO</b>	
g	DCN F715	07.14.21	FSa	Originator	02.08.16	JNa		
f	DCN F363	08.11.20	FSa	Approved	09.21.16	KGu		
e	DCN F257	04.07.20	FSa	 <b>A Murrelektronik Company</b>				
d	DCN F208	03.13.20	FSa				<b>Art. No.: DP-34044-1-000</b>	
Rev.	Description	Date	Name					Sheet
a	Initial release	09.21.16	JNa	DP-34044-1-000_db_e_h.docx	The trademark DEUTSCH is owned by the TE Connectivity Ltd. family of companies.			1 of 5

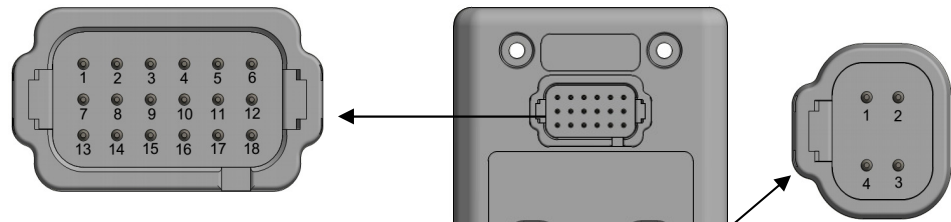
**Characteristics of the Input / Output Ports**

<p><b>Inputs Digital</b>                  Port5: B, A                  Port6: B, A                  Port7: B, A                  Port8: B, A</p>	<p>Positive switching &gt;0.8 V DC                  Ground switching &lt;0.3 V DC                  Input resistance Positive 10 kΩ                  Ground 470 kΩ                  Input response 20 mSec</p> <hr/> <p>Counter/Encoder Input                  Port7 A &amp; Port7 A                  Positive switching &gt;0.8 V DC                  Frequency 0-5000 Hz</p> <p>Default configuration Positive switching</p>
<p><b>Inputs Analog</b>                  Port5: B                  Port6: B                  Port7: B                  Port8: B</p>	<p>Voltage Input                  Input voltage 0...5 V DC                  0...10 V DC                  0...32 V DC                  Resolution 12 bit                  Input resistance 5 V DC 166 kΩ                  10 V DC 55 kΩ                  32 V DC 37.6 kΩ                  Accuracy 1% Full Scale                  Input response 20 mSec</p> <hr/> <p>Current Input                  Input current 0-25 mAmps                  Resolution 12 bit                  Input resistance 162 Ω                  Accuracy 1% Full Scale                  Input response 20 mSec</p> <hr/> <p>Ratiometric Input                  Input voltage 0...32 V DC                  Resolution 0.1% (0 – 100.0%)                  Input resistance 32 V DC 37.6 kΩ                  Input response 20 mSec</p>
<p><b>Outputs</b>                  Port1: B, A                  Port2: B, A                  Port3: B, A                  Port4: B, A</p>	<p>Digital Output                  Output voltage 8...32 V DC                  Switching current 4 Amps</p> <hr/> <p>PWM &amp; PWM(i) Current Controlled Output                  PWM frequency 40-1100 Hz                  PWM(i) frequency 100-700 Hz                  Switching current 4 Amps</p> <p>Default configuration Digital 4 Amps</p>

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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
P1 – P2	Blue	Bus Power (Port Output Power)
IN	Yellow	Left LED – Input A Right LED – Input B
OUT	Yellow	Left LED – Output A Right LED – Output B

**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. GROUND B
  13. BATTERY P1
  14. BATTERY P2
  15. NC
  16. GROUND B
  17. GROUND B
  18. GROUND B

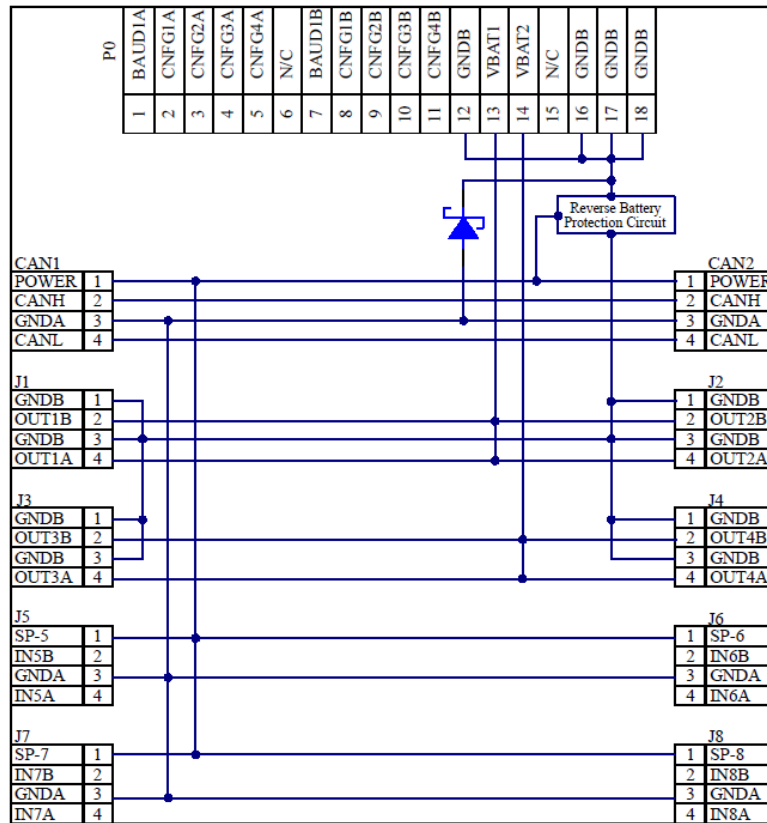
- Connections:
- CAN Port 1 & 2**  
 Pin 1 = POWER  
 Pin 2 = CAN HIGH  
 Pin 3 = GROUND A  
 Pin 4 = CAN LOW

- OUTPUT Ports 1 to 4**  
 Pin 1 = GROUND B  
 Pin 2 = OUTPUT B  
 Pin 3 = GROUND B  
 Pin 4 = OUTPUT A

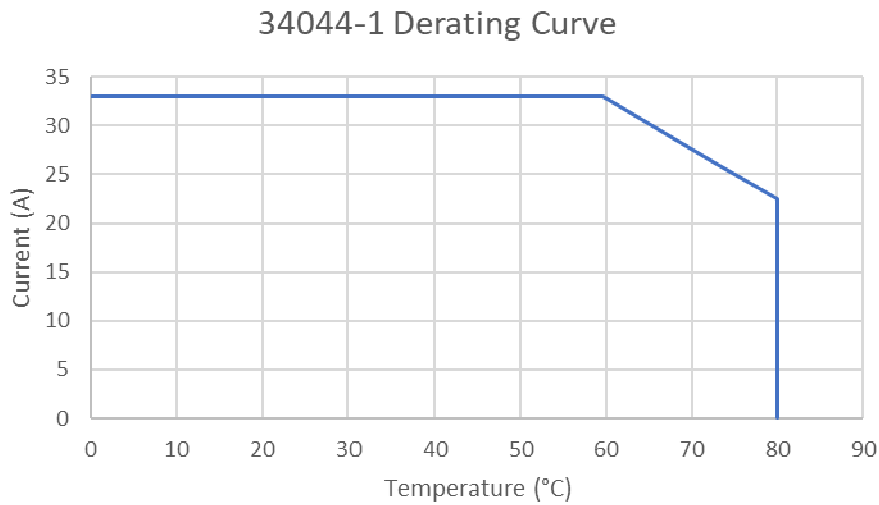
- INPUT Ports 5 to 8**  
 Pin 1 = SENSOR POWER  
 Pin 2 = INPUT B  
 Pin 3 = GROUND A  
 Pin 4 = INPUT A


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DP-34044-1-XXX I/O Diagram



Derating Curve Max Total Current



Rev.	Description	Date	Name				<p style="text-align: center;"><b>Data Sheet</b></p> <p style="text-align: center;"><b>xtremeDB IO Module J1939</b></p> <p style="text-align: center;"><b>xDB0808-DIO</b></p>	<p style="text-align: center;">Art. No.: DP-34044-1-000</p>	<p style="text-align: right;">Sheet 4 of 5</p>
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**Test Standards and Regulation**

<i>Climatic Tests</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 Tests</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 Tests</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>
<i>CE</i>	<i>RoHS: Directive 2011/65/EU</i> <i>EMI/EMC: Directive 2014/30/EU</i>

**Article Numbers**

DP-34044-1-000	J1939 Slave Module
DP-34044-1-100	DPLoGic™ enabled Master, user programmable
DP-34044-1-200	CANopen Slave module



**DPLoGic™**

User function / logic generating and programming tool for creating vehicle personality. Similar to Ladder Logic with user enhanced features for troubleshooting and diagnostics.



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