

Data Sheet

DP-34044-7-000	
xtremeDB xDB08-PVE Molded Plastic I/O Module Ratiometric with Error Input J1939 8...32 Vdc	

Technical Data

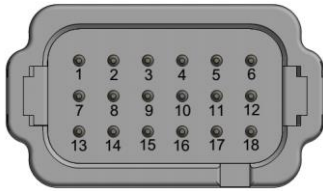
<i>Housing</i>	Molded glass filled nylon
<i>Dimensions (l x w x h)</i>	3.80 x 10.43 x 1.34 in (97 x 265 x 34 mm)
<i>Weight</i>	1.5 lbs (0.68 kg)
<i>Installation (mounting hardware not included)</i>	Screw: 3 x #10 (3 x M5) Torque: 21 in-lbs (2.4 Nm) max.
<i>Mating Connectors and Accessories</i> <i>Operating 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 0462-201-16141 (16 – 20 AWG) 1062-16-0122 (14 – 18 AWG) 114017
<i>DEUTSCH® size 16 Socket</i>	
<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 A continuous per pin max. 40 A 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
<i>Output Type</i>	14 digital positive, 8 ratiometric
<i>Input</i>	8 digital positive/negative (>8.0 V DC / <0.3 V DC)
<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.

k	DCN 6022	08.28.23	AH				Data Sheet xtremeDB IO Module J1939 xDB08-PVE
j	Wire Diagram	12.20.21	FSa		Date	Name	
i	DCN F750	09.09.21	FSa	Originator	06.04.18	JNa	
h	DCN F715	07.14.21	FSa	Approved	9.17.19	Fsa	
g	DCN F614	03.22.21	FSa	 A Murrelektronik Company			
f	DCN F558	02.16.21	FSa				
Rev.	Description	Date	Name				Art. No.: DP-34044-7-000
a	Init Release	06.04.18	JNa	DP-34044-7-000_db_e_j			

Characteristics of the Output Ports

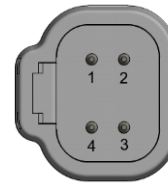
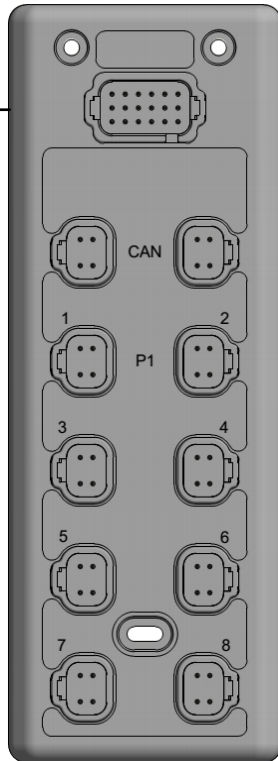
Outputs	Voltage Output Output Voltage 8...32 Vdc Switching Current 3A	
Operating States (LEDs)		
Color	Status	
<i>PWR</i>	<i>Blue</i>	<i>Module and Ports BATTERY are connected</i>
<i>COM & STAT</i>	<i>Green</i>	<i>Module and Communication status</i>
<i>FLT</i>	<i>Red</i>	<i>Fault Status</i>
<i>P1</i>	<i>Blue</i>	<i>Bus Power (Port Output Power)</i>
<i>OUT</i>	<i>Yellow</i>	<i>Left LED – Output A</i> <i>Right LED – Output B</i>

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. GND EXT
13. BATTERY P1
14. BATTERY P1
15. BATTERY P1
16. GND EXT
17. GND EXT
18. GND EXT



Connections:

- CAN Port 1 & 2**
 Pin 1 = POWER
 Pin 2 = CAN HIGH
 Pin 3 = CAN SHIELD
 Pin 4 = CAN LOW

OUTPUT Ports 1 to 8 (Ratiometric)

- Pin 1 = OUTPUT A (U_s)
 Pin 2 = INPUT B (Error)
 Pin 3 = GROUND B
 Pin 4 = SENSOR POWER (U_{DC})

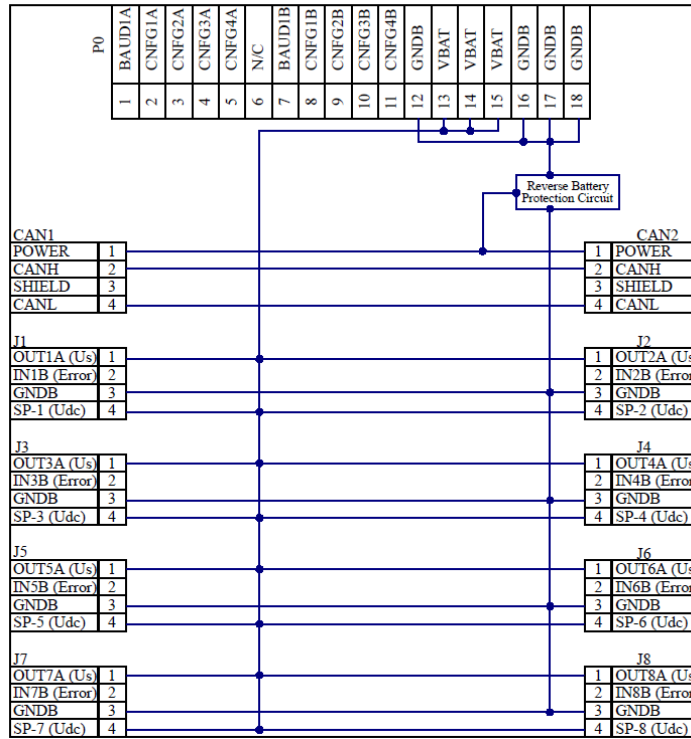
OUTPUT Ports 3 to 8 (Digital)**

- Pin 1 = OUTPUT A (U_{DC_A})
 Pin 2 = GROUND
 Pin 3 = GROUND B
 Pin 4 = OUTPUT B (U_{DC_B})

**Note that Port 1 and Port 2 cannot be used for PVEO


k	DCN 6022	08.28.23	AH				Data Sheet xtremeDB IO Module J1939 xDB08-PVE	Sheet 2 of 4
j	Wire Diagram	12.20.21	FSa		Date	Name		
i	DCN F750	09.09.21	FSa	Originator	06.04.18	JNa		
h	DCN F715	07.14.21	FSa	Approved	9.17.19	Fsa		
g	DCN F614	03.22.21	FSa	 A Murrelektronik Company				
f	DCN F558	02.16.21	FSa	Art. No.: DP-34044-7-000				
Rev.	Description	Date	Name					
a	Init Release	06.04.18	JNa	DP-34044-7-000_db_e_j			The trademark DEUTSCH is owned by the TE Connectivity Ltd. family of companies.	

DP-34044-7-XXX I/O Diagram



Test Standards and Regulation

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

k	DCN 6022	08.28.23	AH				Data Sheet xtremeDB IO Module J1939 xDB08-PVE Art. No.: DP-34044-7-000	Sheet 3 of 4
j	Wire Diagram	12.20.21	FSa		Date	Name		
i	DCN F750	09.09.21	FSa	Originator	06.04.18	JNa		
h	DCN F715	07.14.21	FSa	Approved	9.17.19	Fsa		
g	DCN F614	03.22.21	FSa	 A Murrelektronik Company				
f	DCN F558	02.16.21	FSa					
Rev.	Description	Date	Name					
a	Init Release	06.04.18	JNa	DP-34044-7-000_db_e_j				

Application Notes

PVE Compatibility


Special xtremeDB variant that acts as a PVG Valve Driver providing ratiometric or digital output signals to drive up to 8 PVE's. PVE can be of type PVEA, PVEH, PVES, or PVEO.

Article Numbers

DP-34044-7-000

J1939 Slave Module



k	DCN 6022	08.28.23	AH				
j	Wire Diagram	12.20.21	FSa		Date	Name	Data Sheet xtremeDB IO Module J1939 xDB08-PVE
i	DCN F750	09.09.21	FSa	Originator	06.04.18	JNa	
h	DCN F715	07.14.21	FSa	Approved	9.17.19	Fsa	
g	DCN F614	03.22.21	FSa	 A Murrelektronik Company			
f	DCN F558	02.16.21	FSa				
Rev.	Description	Date	Name	Art. No.: DP-34044-7-000			<i>Sheet</i> 4 of 4
a	Init Release	06.04.18	JNa	DP-34044-7-000_db_e_j			<small>The trademark DEUTSCH is owned by the TE Connectivity Ltd. family of companies.</small>