

Data Sheet

DP-34044-1-000

xtremeDB

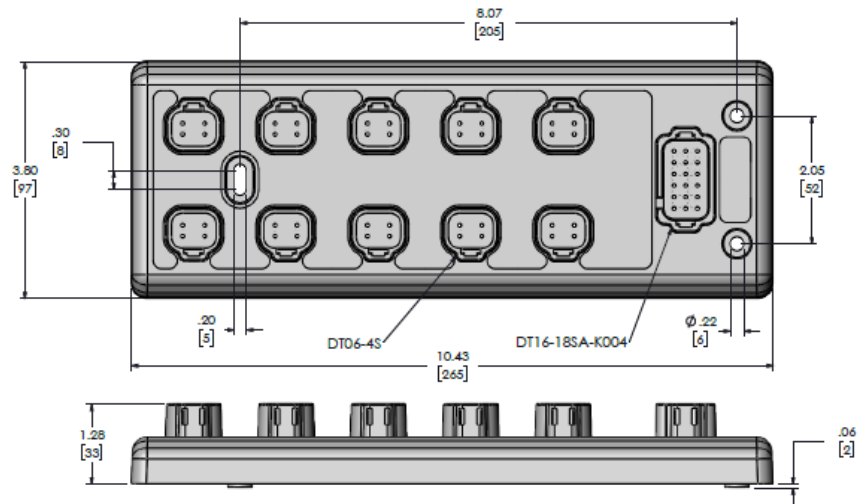
xDB0808-DIO

Molded Plastic

I/O Module
Digital and Analog


J1939

8...32 V DC



Technical Data


Housing	Molded glass filled nylon
Dimensions (l x w x h)	3.80 x 10.43 x 1.34 in (97 x 265 x 34 mm)
Weight	1.5 lbs (0.68 kg)
Installation (mounting hardware not included)	Screw: 3 x #10 (3 x M5) Torque: 21 in-lbs (2.4 Nm) max.
Mating Connectors and Accessories Operating Voltage, Ground, and Configuration I/O-Ports	18 Pole Plug DT16-18SA or equivalent 4 Pole Plug 10 x DT06-4S or equivalent
DEUTSCH® size 16 Socket	0462-201-16141 (16 – 20 AWG) 1062-16-0122 (14 – 18 AWG) 114017
DEUTSCH® Seal Plug	
Cable Length	98.4 ft (30 m) max.
Operating Voltage	8...32 V DC protected against reverse polarity
Operating Current	13 Amps continuous per pin max. 26 Amps max node current
Communication Interface and Baud Rate	2 non-isolated J1939 ports 250kb (default) & 500kb
Source Address	Base Address 224d (0xE0h) Offset 0...15 (J0: CNFGx-A/B)
Total Inputs and Outputs	16 (8 Inputs & 8 x 4 Amp Outputs)
Inputs Diagnostics	Over voltage and sensor power overcurrent
Output (sensor power)	1 Amp max.
Operating Temperature	-40...80 °C
Storage Temperature	-40...85 °C
Protection Class	IP67: Connector seal plugs required for unused pins. Sealing plugs required for unused ports IP68/IP69K: Using Murrelektronik MDC xtreme cables.

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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	 A Murrelektronik Company			
d	DCN F208	03.13.20	FSa				
Rev.	Description	Date	Name				Art. No.: DP-34044-1-000
a	Initial release	09.21.16	JNa	DP-34044-1-000_db_e_h			

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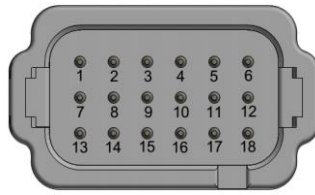
Characteristics of the Input / Output Ports

Inputs Digital Port5: B, A Port6: B, A Port7: B, A Port8: B, A	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 & Port7 A Positive switching >0.8 V DC Frequency 0-5000 Hz ----- Default configuration Positive switching
Inputs Analog Port5: B Port6: B Port7: B Port8: B	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 ----- Current Input Input current 0-25 mAmps Resolution 12 bit Input resistance 162 Ω Accuracy 1% Full Scale Input response 20 mSec ----- 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
Outputs Port1: B, A Port2: B, A Port3: B, A Port4: B, A	Digital Output Output voltage 8...32 V DC Switching current 4 Amps ----- 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

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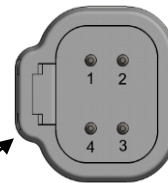
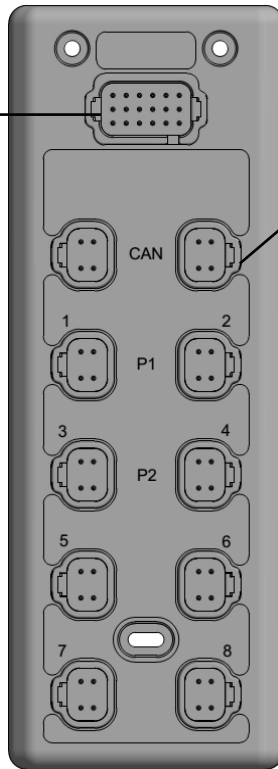
Operating States (LEDs)	Color	Status
PWR	Blue	Module and Ports power are connected
COM & STAT	Green	Module and Communication status
FLT	Red	Fault Status
P1 – P2	Blue	Bus Power (Port Output Power)
IN	Yellow	Left LED – Input A Right LED – Input B
OUT	Yellow	Left LED – Output A Right LED – Output B

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

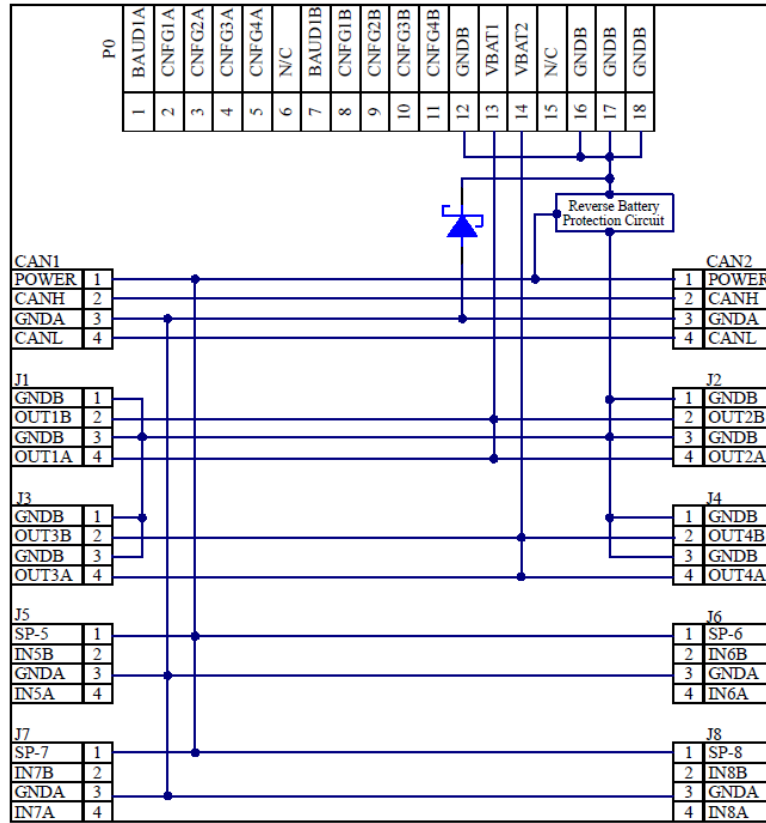
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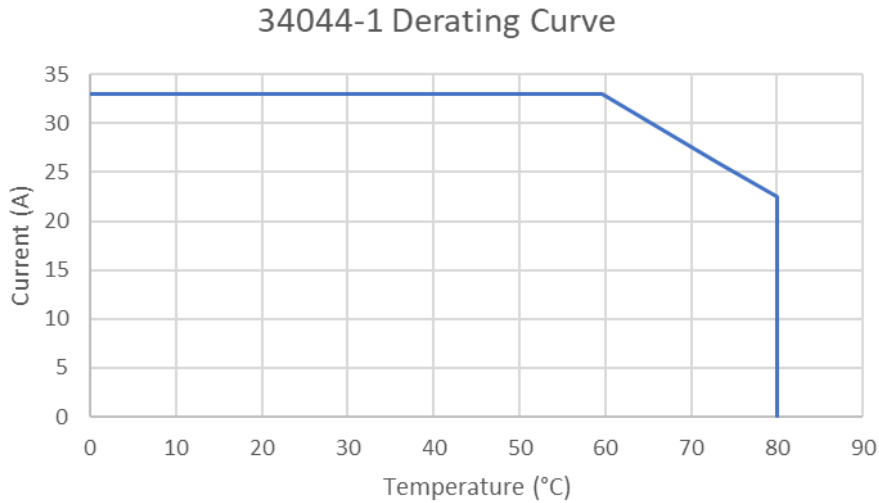
Proper installation and operation of the xtremeDB blocks requires the use of all ground connections. This includes Ground (A) for module power and Ground (B) for port power on the 18 pin configuration and power plug.


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DP-34044-1-XXX I/O Diagram



Derating Curve Max Total Current



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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	DPLoLogic™ enabled Master, user programmable
DP-34044-1-200	CANopen Slave module



DPLoLogic™

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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