

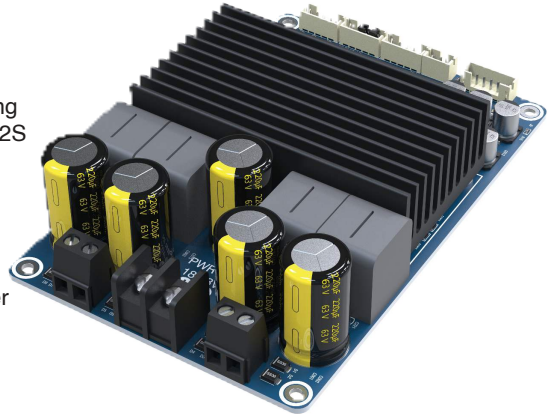
BDM8

2 x 300W Audio Amplifier Board

BDM8 is a high-power audio amplifier based on TI's TPA3255 IC, delivering 300W per channel into a 4Ohm load. Besides that, BDM8 offers line and I2S signal output for more possibility.

Features:

- | | |
|---|--|
| <p>High Power</p> <ul style="list-style-type: none"> • Strong Driving Capacity • Robust Heatsink • High Reliability | <p>High Performance</p> <ul style="list-style-type: none"> • TPA3255 Amp IC, 2x300W • High Efficiency and Low Power Consumption • High Quality Component |
|---|--|



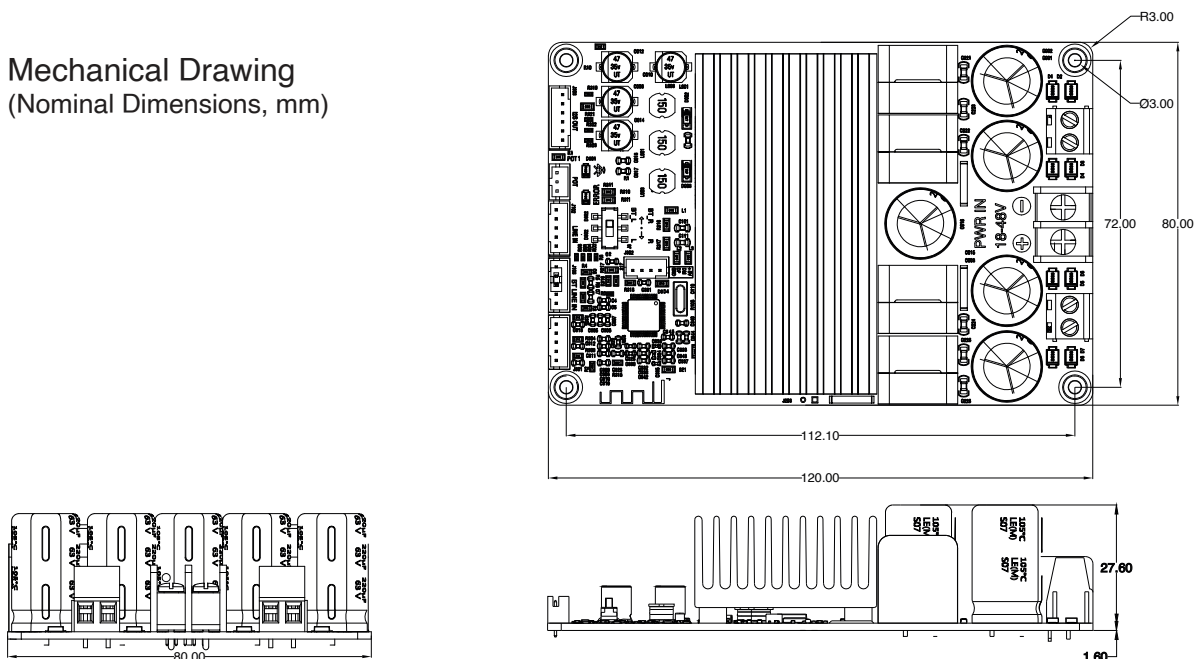
Parameters:	
Bluetooth Version	5.0
Bluetooth Name	BDM8
Supply Voltage	DC 18V - 48V
Audio Input Source	Bluetooth & Line Input

Parameters:	
Output Channel	2.0CH
Output Power	300W + 300W 4Ω
Product Size	120mm x 80mm x 27.50mm
Weight	232.9g

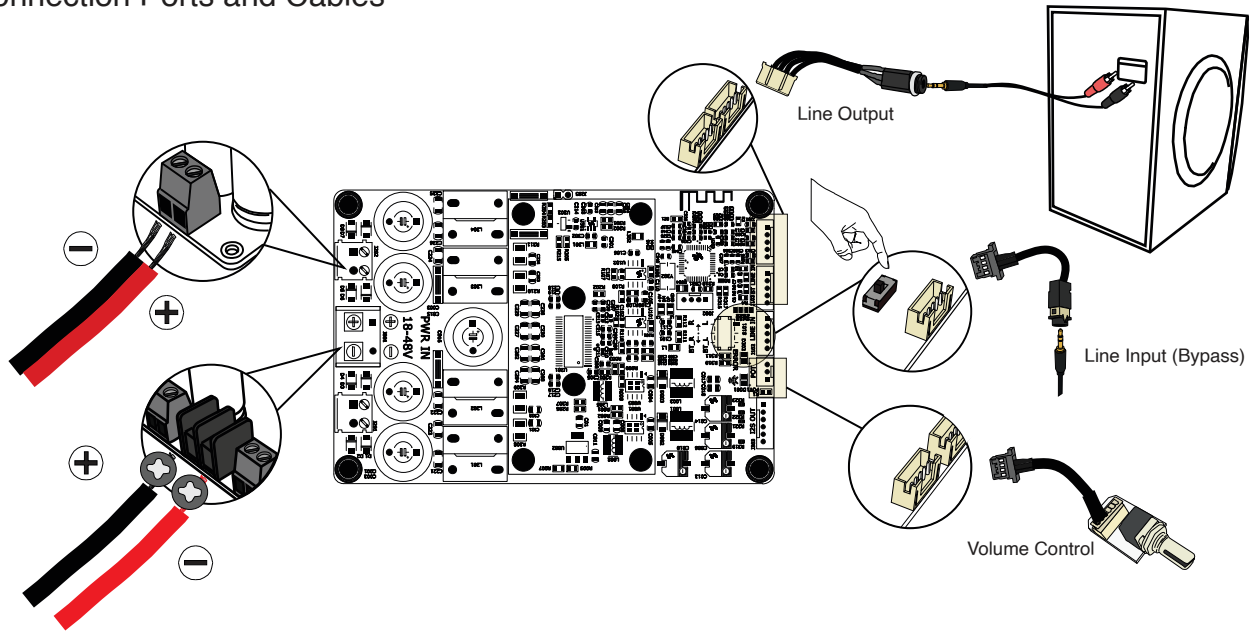
Port Introduction



Mechanical Drawing (Nominal Dimensions, mm)



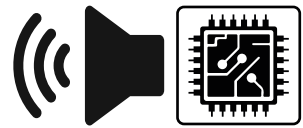
Connection Ports and Cables



THD Audio Test Performance

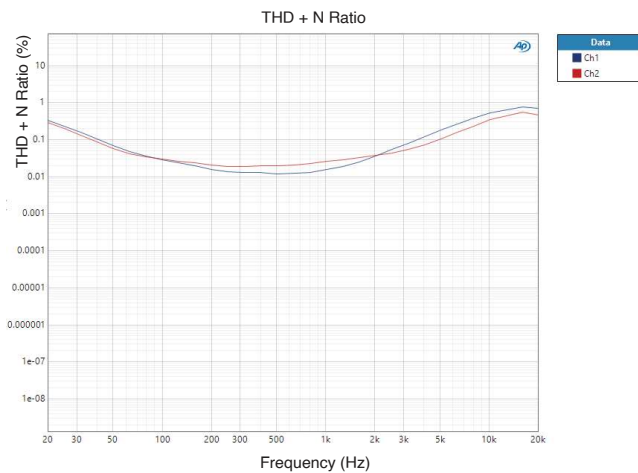
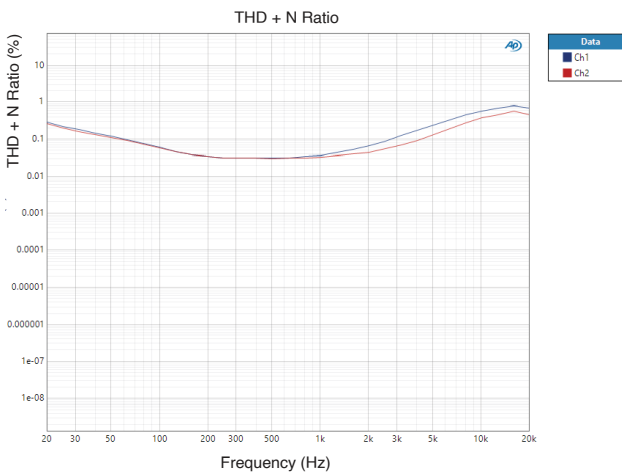
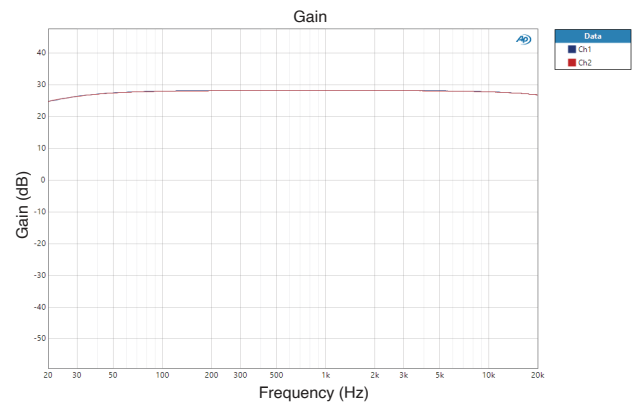
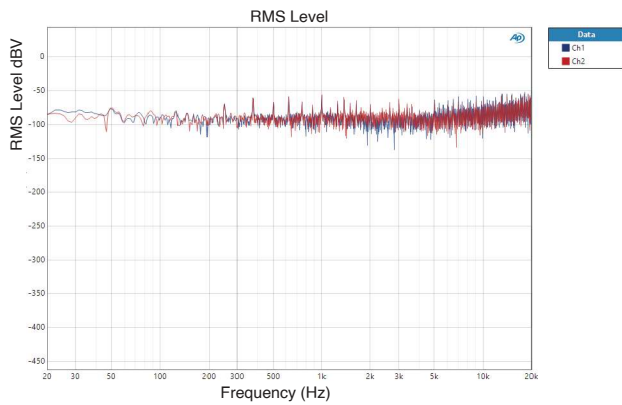
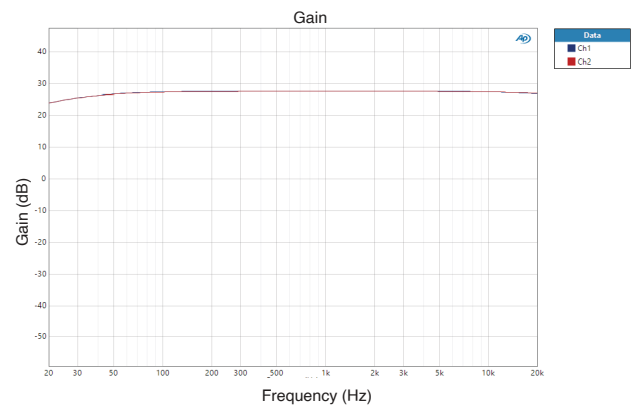
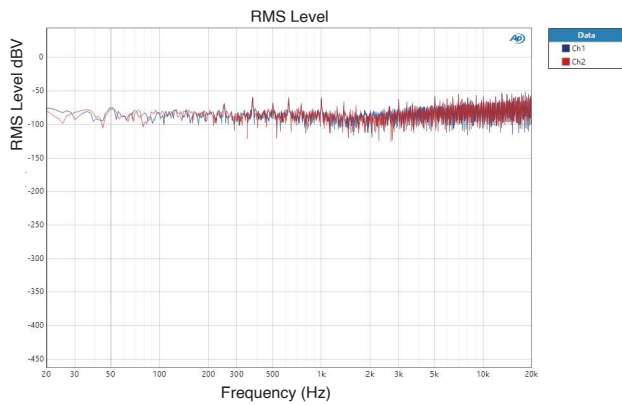
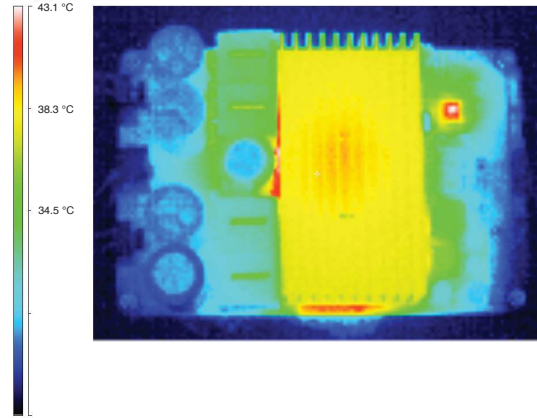
Parameter	Conditions	Min.	Typ.	Max.	Units
Number of Channels	-	-	2	-	-
Minimum Load Impedance	-	3	4	-	Ω
Efficiency	2x 150W@36V,40hm, 1kHz	-	85	-	%
Nominal Power Requirement	@36V, 1kHz	-	300	-	W
Operating Voltage	@1kHz, 40hm	18	24	36	V
Idle Power	Signal detected@36V	-	3.3	-	W
Switching Frequency	SD Floating@36V	-	450	-	kHz
Power Consumption	1/4 of max output power@40hm, 36V, 1kHz	-	90	-	W
	1/8 of max output power@40hm, 36V, 1kHz	-	50	-	W
Number of Channels	SD short to GND	-	0.1	-	mW

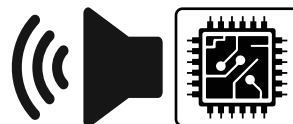
Parameter	Conditions	Output	Min.	Typ.	Max.	Units
Amp Gain	Line In	OUT1	-	27.53	-	dB
		OUT2	-	27.47	-	dB
	BT Line In	OUT1	-	28.04	-	dB
		OUT2	-	28.09	-	dB
SNR	Line In 2 x 150W@40hm, , A-weighting	OUT1	-	95.0	-	dB
		OUT2	-	94.5	-	dB
	BT Line In 2 x 150W@40hm,, A-weighting	OUT1	-	98.5	-	dB
		OUT2	-	97.8	-	dB
THD+N	Line In 1W@40hm, 1kHz	OUT1	-	0.0048	-	%
		OUT2	-	0.0050	-	%
	BT Line In 1W@40hm, 1kHz	OUT1	-	0.013	-	%
		OUT2	-	0.012	-	%
Output Noise Level	Line In A-weighting, Input Connected to GND	OUT1	-	235	-	uV
		OUT2	-	257	-	uV
	BT Line In A-weighting, Input Connected to GND	OUT1	-	252	-	uV
		OUT2	-	278	-	uV
Input Impedance	Line In&BT Line In@40hm, 1kHz,		-	20	-	kΩ
Input Sensitivity	Line In, 2 x 150W@40hm, 1kHz	OUT1&OUT2	-	1	-	V
	BT Line In, 2 x 150W@40hm, 1kHz	OUT1&OUT2	-	1	-	V
DC Offset	-		-	15	-	mV









Crosstalk	
Line in	-67dB
BT Line in	-68dB

RMS Wattage Output	
0.775V rms	2x100W
1.05V rms	2x150W





BDM Series Product Overview

					
BDM0	BDM1	BDM3	BDM3P	BDM5	BDM8/8A
Output Power 2x5W	Output Power 2x5W	Output Power 2x25W	Output Power 2x50W	Output Power 2x200W	Output Power 2x300W (TPA3255)
Power Supply USB Type-C DC 5V	Power Supply DC 5V/ Battery	Power Supply DC12-19V	Power Supply DC12-19V	Power Supply DC 18-48V	Power Supply DC24-48V
BT V5.0 BT TWS	BT V5.0 BT V.50	BT V5.0 BT V5.0	BT V5.0 BT V5.0	BT V5.0 BT V5.0	BT V5.0 BT V5.0
PC UI N	PC UI N	PC UI Y	PC UI N	PC UI Y	PC UI Y

BDM Series Product Accessories

Product accessories can be downloaded on our website. We provide STL files for the purpose of 3D printing. If you have a 3D printer, you can continue to print them on your own. Alternatively, if you don't have a printer, you can send the STL file we provided to a store that offers 3D printing services.



Warranty Terms and Product Usage Restrictions

CJL products come with a one-year warranty starting from the date of purchase. Customers are responsible for the cost of returning the goods to the seller, and by making a purchase, you agree to this condition. Due to the nature of DIY products, visible damage or use on screw holes or tinning of solder pads directly invalidates the warranty. Damage caused by the use of incorrect power sources, such as exceeding the specified voltage range or reverse polarity, is not covered under warranty. All CJL products undergo thorough testing before shipment. We do not accept bulk returns after a bulk purchase. If you are unsure of the quantity you need, please purchase the appropriate quantity as needed. All CJL products are intended for DIY use only and do not support any industrial applications. The rated operating temperature range is 0-40°C. Please refrain from using CJL products in industrial or any special industrial environments. If you require products tested for industrial operating temperature ranges, we recommend seeking products clearly labeled to support operating ranges such as -20-65°C or -40-85°C.

Designed by:



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(Please use phone calls or email instead of WhatsApp or iMessage.)

To view our products and purchase, please check the Taobao or Aliexpress website by searching for the product name (example: BDM0).

Bulk Purchase Rights

All rights for bulk purchases are limited to the quantity purchased in a single transaction and are not related to the annual or cumulative purchase quantity. Due to cost considerations, any customization and pricing are determined based on the quantity purchased in a single transaction. Retail purchases can only be made through Taobao and AliExpress platforms, and there are no other purchasing channels. The listed prices visible on the platform are the retail prices, which may fluctuate at any time.

For purchases that meet the minimum quantity of 100 units, you can find the bundled price for 100 units of the product on Taobao and AliExpress platforms. We do not provide any form of modification to existing products or additional price discounts for quantities below 500 units. The bundled price for quantities of 100 units may vary.

For purchases that meet the minimum quantity of 500 units, you can send an email to our contact mailbox to customize the PCB color and silk screen for products with enclosures, and have your brand logo placed on the PCB or enclosure. CJL does not provide any other form of customization services such as changing PCB dimensions or adding/removing ports. There is a standard price list for purchases of 500 units or more, which can be requested from our contact mailbox. You can sell at a price you deem appropriate, but there is not a significant difference between the bulk price and the bundled price based on 100 units.

Origin and Design Location

All CJL products are designed, manufactured, assembled, and shipped from China. The products' country of origin is China. We do not provide any services for sales, shipping, or manufacturing from other regions.