The BeoCreate
4-Channel Amplifier

The BeoCreate 4-Channel Amplifier

The Beocreate 4-Channel Amplifier is a very flexible DSP/DAC/amplifier combination board designed for high-quality music playback in combination with passive loudspeakers.

FACTS

- Up to 180W output power (2x30W, 2x60W)
- Capable of driving up to four of 4-8 Ohm speakers (the two 60W channels can drive 2 Ohm speakers)
- Fully controllable from the Raspberry Pi
- Sample rates up to 192kHz
- 4-Channel digital-analog conversion included
- Connects directly to the Raspberry Pi A+/B+/2B/3B/Zero, no additional cables needed
- Only one 12-24V external power supply needed to power both the Beocreate board and a Raspberry Pi, no need for an external USB power supply
- No soldering required, the Raspberry Pi can be plugged easily onto the Beocreate board. Speakers can be connected via screw terminals
- Can work standalone (without the Raspberry Pi) as a digital amplifier. However, to program the DSP, a Raspberry Pi is required

DIMENSIONS WITHOUT PACKAGE

12.5 x 9.5 x 2.5 cm

DIMENSIONS INCLUDING PACKAGE

-

WEIGHT

0.09 kg

GTIN 4260439550521

USAGE RECOMMENDATIONS

- DIY active speakers
- up-cycling of vintage speakers
- room acoustics corrections
- up-/down-/resampling applications

CREATE BANG & OLUFSEN HiFiBerry

FEATURES

• 294MHz DSP with 16kB data RAM and 8kB program RAM

• 16 asynchrounous sample rate converters allow to handle different sample rates on different inputs and outputs

• DSP can be fully programmed by the end user using Analog's SigmaStudio (requires a PC with Microsoft Windows)

• nboard EEPROM allows to use the board standalone without a Raspberry Pi

• TOSLink input and output (up to 96kHz sample rate)

• 4 channel DAC supports sample rates of from 44.1kHz to 192kHz

• 2x60W and 2x30W Class-D output stages

• expansion connector allows to connect additional hardware (access to Raspberry Pi and DSP GPIOs)

• can be used as a 2-channel sound card from the Raspberry Pi

• multiple devices can be chain-linked using SPDIF (e.g. to implement an active 4-way stereo system)

CONNECTORS

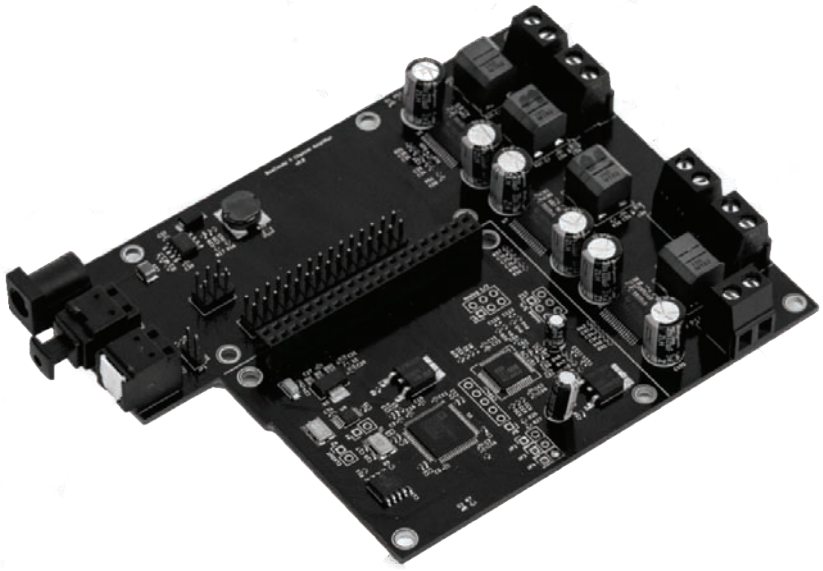
• TOSLink input and output connectors

• 5.5mm barell jack and screw terminal for external 12-24V power supply

• 4x screw terminal to connect loudspeakers

• 34 pin expansion connector

• programming header (compatible with Analog Devices USBi interface)



CREATE BANG & OLUFSEN HiFiBerry

ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITIONS	TYPICAL
Output power per channel	Vsupply=12V, f=1kHz, Rspk = 4Ohm, THD+N < 0.1%	15W
	Vsupply=18V, f=1kHz, Rspk = 4Ohm, THD+N < 0.1%	30W
	Vsupply=24V, f=1kHz, Rspk = 4Ohm, THD+N < 0.1%	40W
	Vsupply=12V, f=1kHz, Rspk = 8Ohm, THD+N < 0.1%	8W
	Vsupply=18V, f=1kHz, Rspk = 8Ohm, THD+N < 0.1%	16W
	Vsupply=24V, f=1kHz, Rspk = 8Ohm, THD+N < 0.1%	30W
Maximum output power per channel	Vsupply=12V, Rspk = 4Ohm, THD+N < 10%	19W
	Vsupply=18V, Rspk = 4Ohm, THD+N < 10%	40W
	Vsupply=24V, Rspk = 4Ohm, THD+N < 10%	70W
	Vsupply=12V, Rspk = 8Ohm, THD+N < 10%	10W
	Vsupply=18V, Rspk = 8Ohm, THD+N < 10%	23W
	Vsupply=24V, Rspk = 8Ohm, THD+N < 10%	40W