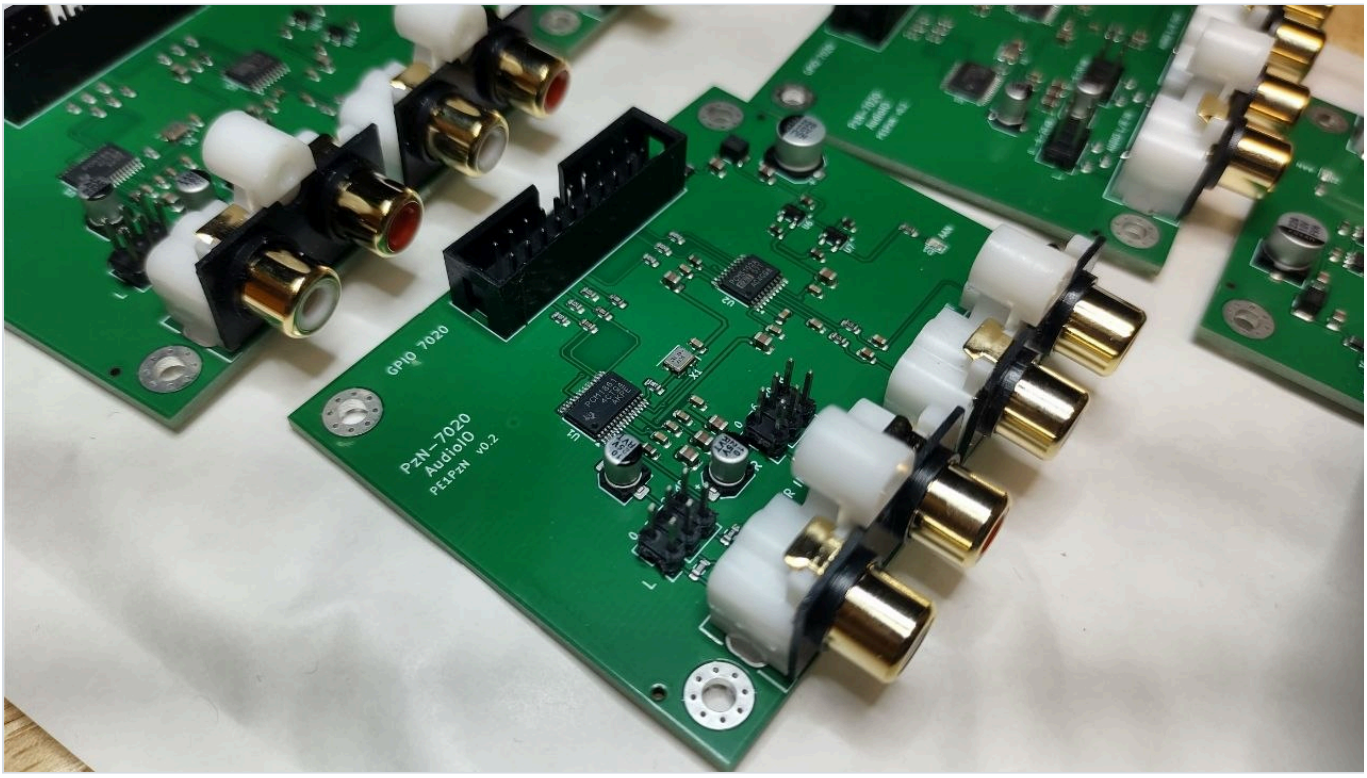
PzN-7020 **AudioIO**

Analogue audio input and output for the Zynq 7020 SDR · PE1PzN · manual for board v0.2 (November 2026)



The PzN-7020-AudioIO v0.2.

1. What it is

The AudioIO is a board with an **ADC** (audio in) and a **DAC** (audio out) for the Zynq 7020 SDR. It connects to the GPIO header of the 7020 with a single 20-way ribbon cable. No software or settings needed: plug and play.

Program	What the AudioIO does
digiNICAM, DigiPCM, DigiFM-Optimal	Audio in for transmitting (ADC).
digiWUFFUM	Transmit your own MPX with RDS (ADC, 192 kHz).
digiATV	Listen to the received audio (DAC).
ZATV	Input and output.

The board makes its own clean supply from the 5 V of the 7020. So you only need one power supply: a good 5 V adapter of at least 3 A, for example the one for a Raspberry Pi 4.

2. Connections on the board

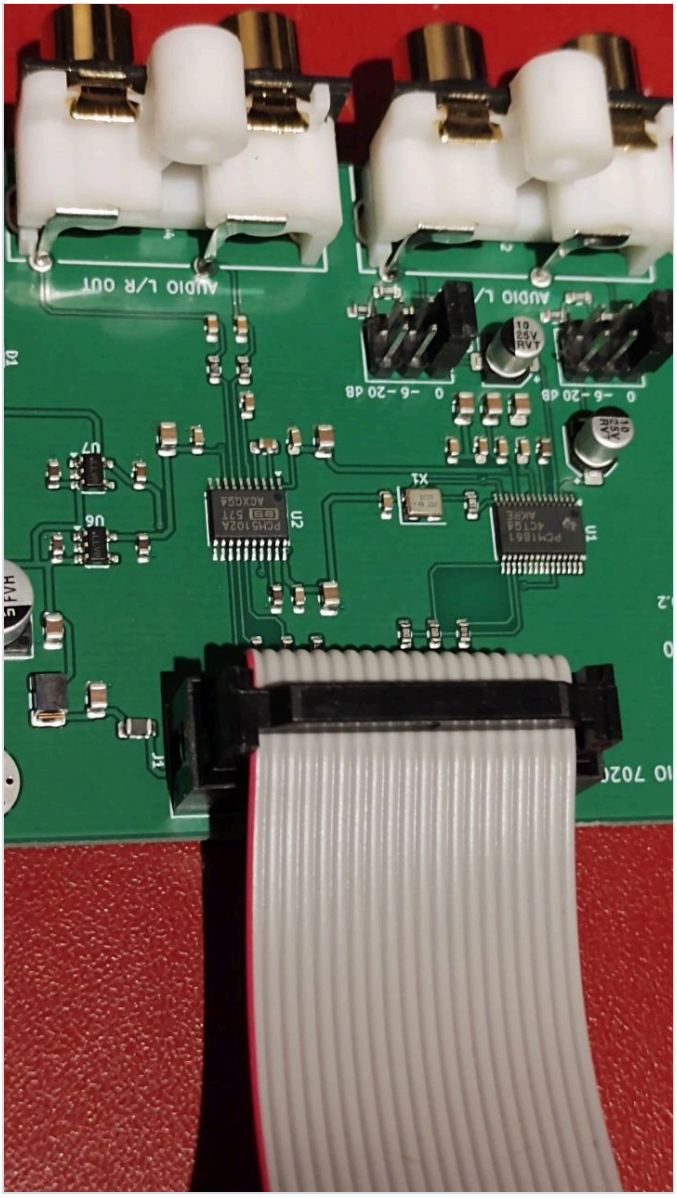
On the board	What
AUDIO L/R IN	Audio in (ADC). White = left, **red = right**.
AUDIO L/R OUT	Audio out (DAC). White = left, **red = right**.
Two jumpers (L and R)	Input attenuator: 0, −6 or −20 dB. See chapter 5.
GPIO 7020	20-way header for the ribbon cable to the 7020.

3. The ribbon cable

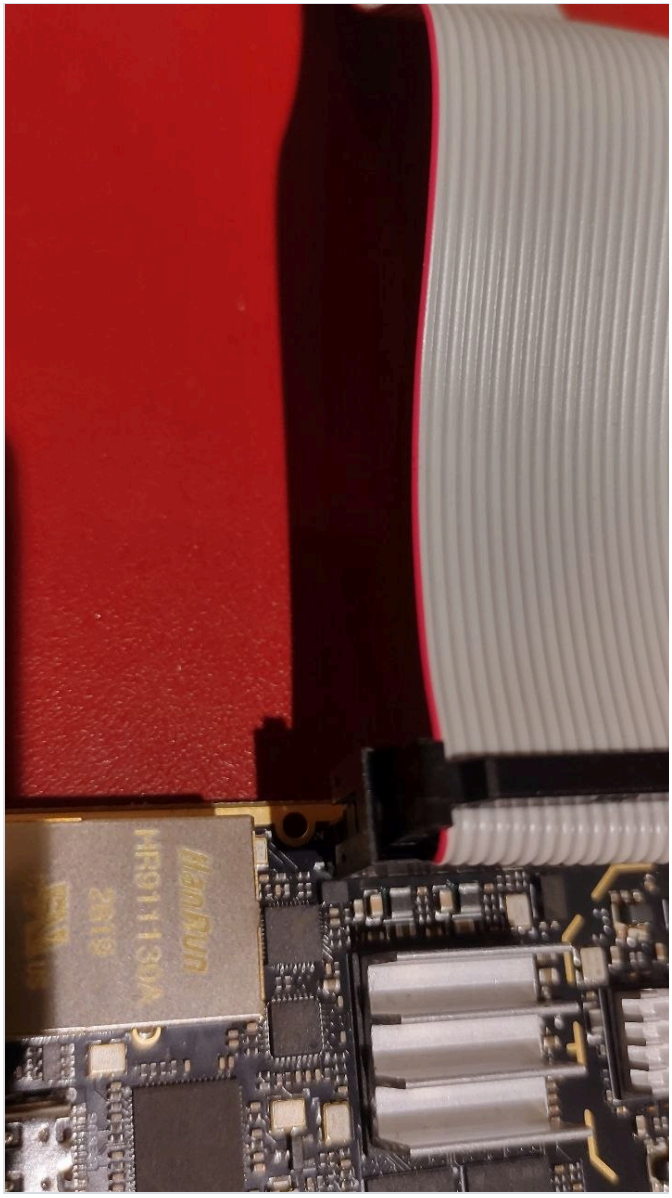
The **red wire** is **pin 1**.

> **The red wire goes on the side of the network jack of the 7020.**

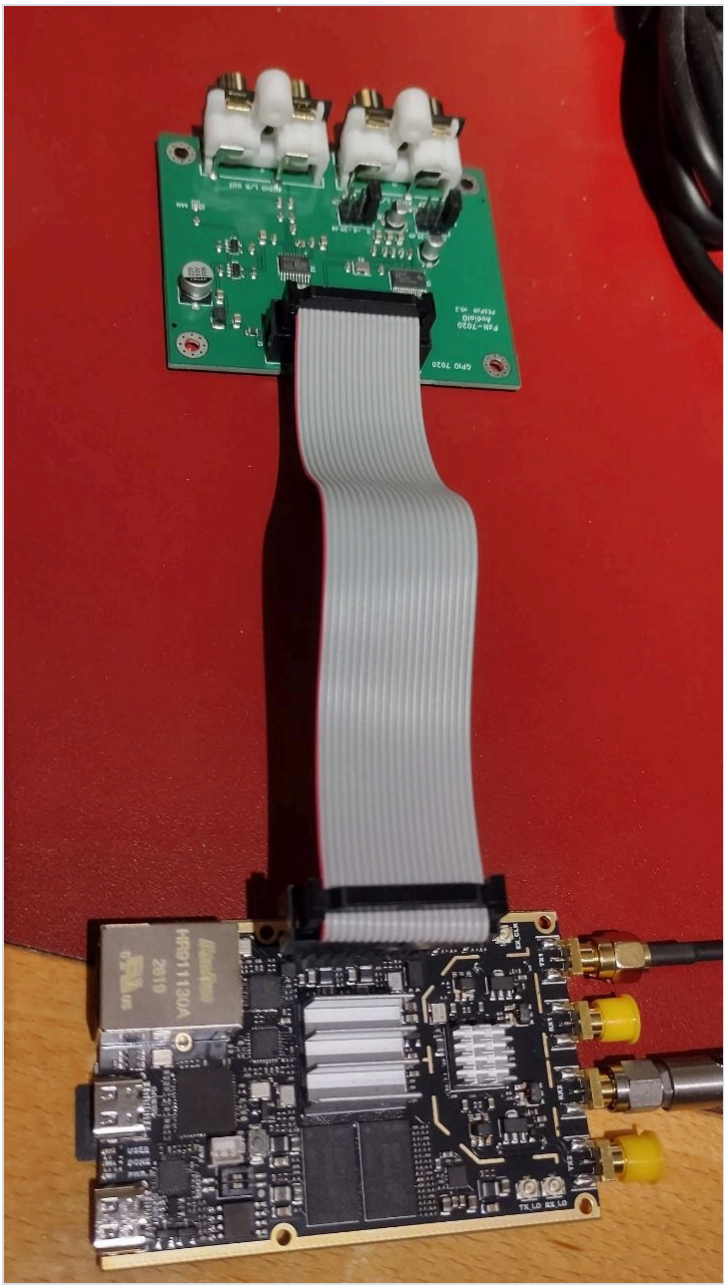
On the AudioIO the plug fits only one way (key).



On the AudioIO: the red wire is on the side of the large electrolytic capacitor (left in the photo).



On the 7020: the red wire is on the side of the network jack.



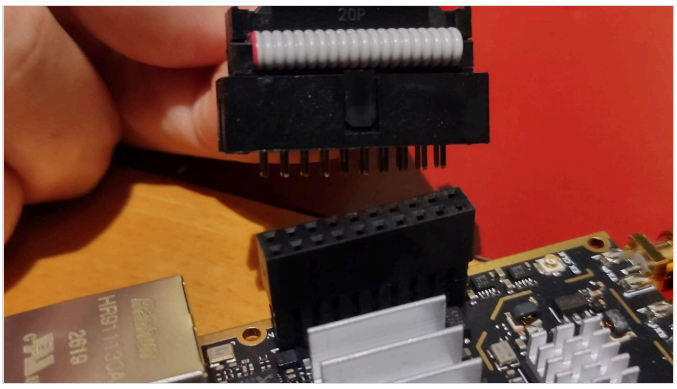
Connected. The AudioIO at the top, the 7020 at the bottom.

4. Connecting to the 7020

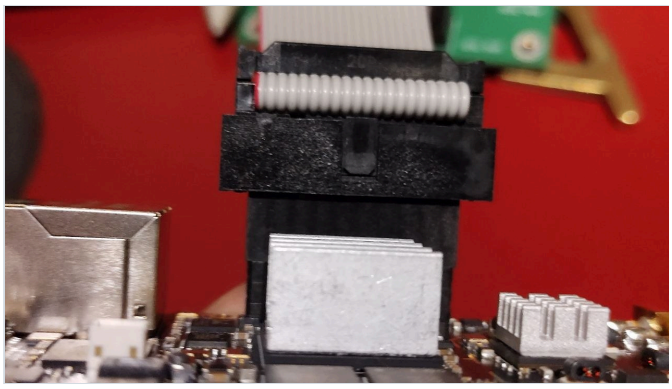
A loose header comes with the AudioIO. You use it in both cases.

4a. 7020 with a socket on the GPIO

Push the loose header into the socket of the 7020 and the ribbon cable onto it, with the **red wire on the side of the network jack**.



The loose header with the ribbon cable on it, just above the socket of the 7020.



Pushed in. The red wire is on the left, on the side of the network jack.

4b. 7020 with holes only

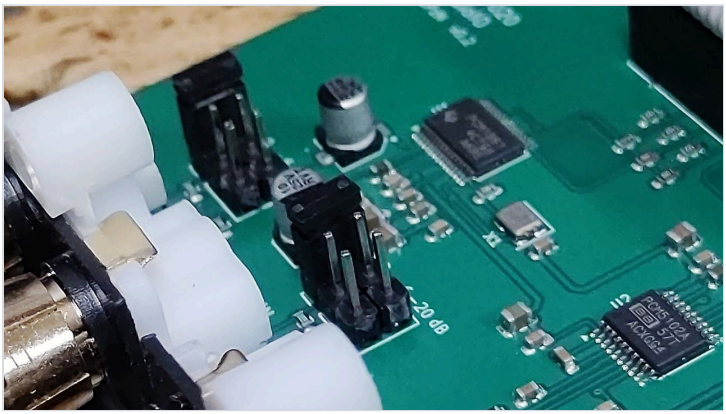
Carefully solder the loose header onto the 7020.

> **PAY ATTENTION: the key slot of the header must face the INSIDE of the 7020.**

The **red wire** will then be on the side of the network jack.

5. The attenuator (jumpers)

One jumper for left (L) and one for right (R): **0**, **−6** or **−20 dB**.



The two attenuator jumpers, with the settings printed on the board.

> Only connect or disconnect the ribbon cable with the 7020 switched off.