

BR262HM1.1 Product Brief

The BelaSigna R262 Host Module 1.1 (HM1.1) is a USB-bus powered unit designed around the STM32L052R8 micro controller that implements a stereo 32kHz USB audio (microphone) interface. The BelaSigna R262 output sound is streamed to a host computer via USB. The HM1.1-board comprises a good starting point for designing-in the BelaSigna R262 DSP in an embedded context by displaying how to handle outgoing sound and how to control the BelaSigna DSP. The micro controller source code that interfaces the BelaSigna and implements the USB audio is available in an extended module variant.

Key Features

- A miniature size of only 25 mm by 50 mm
- [The 26-ball WLCSP version of BelaSigna R262 \(BR262W26A103E1G\)](#)
- Two MEMS microphones spaced 10 mm apart (Knowles part number SPU0410HR5H-PB)
- Push button to select BelaSigna R262 operating mode (algorithm on/off)
- LED indicates USB connection, streaming status and algorithm on/off state
- ADAU7002ACBZ converts the BelaSigna R262 PDM output signal to stereo I2S
- STM32L052R8 micro controller that implements:
 - Crystal-less stereo I2S to USB audio conversion at 32 kHz, 16 bits
 - Adaptive sample rate matching between I2S and USB clocks
 - I2C interface to control the BelaSigna R262



<https://dspboards.one/br262hm>

Feel free contacting us with any questions or comments to this product.

www.sallberg.at

Sällberg Technologies

