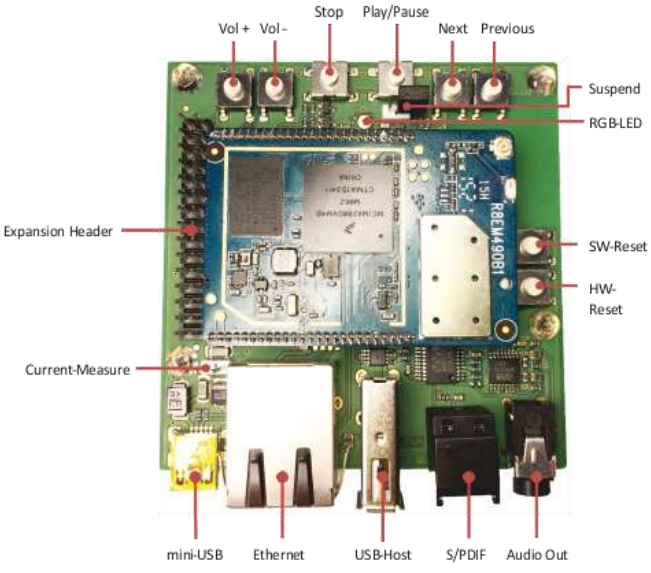
Evaluation Board

Hardware platform for the LinTech HBM10 and HBM11 WLAN audiomodule

The HBM10/11 evaluation board is designed to aid in the evaluation and development of WLAN audio applications based on the HBM10 or HBM11 WLAN audiomodule.
The WLAN audiomodule is the heart of the system. It is connected to the evaluation board through two 1.27mm pitch 25-pin connectors.
The software provided with the board controls all features of the WLAN audiomodule such as operation mode, interfaces, status information and audio control functions. A detailed description is included in the scope of delivery.

The board is equipped with several interfaces, control buttons, an expansion header and jumpers:

- 2x USB
  - 1x USB 2.0 Host port
  - 1x USB 2.0 OTG port
- 1x 10/100 Mbps Ethernet (RJ45 jack)
- 2x Audio output port
  - 1x S/PDIF (TOSLINK)
  - 1x Analog audio out (3.5 mm jack)
- 1x RGB-Led
- 8x Buttons
- 2x Jumpers
  - 1x Measuring power consumption
  - 1x Standby mode
- 2x 2.0mm 30-pin expansion header
  - 1x Debug UART
  - 1x Application UART
  - 1x I2C
  - 1x I2S
  - 1x Audio line out (L/R)
  - 4x GPIO
  - 1x VDDIO (3.3 V)
  - 1x Ground
  - 2x Analog Ground



Top View of the HBM10 Evaluation Boards with interfaces

There are eight user buttons on the evaluation board for Hardware/Factory Reset, Volume +/-, Next, Previous, Stop, Play, Pause.

The evaluation board is assembled with two USB ports:

- USB plug type A receptacle for a USB 2.0 Host device
- USB plug mini-B receptacle providing a 5V DC power supply

The evaluation board features two hardware audio codecs:

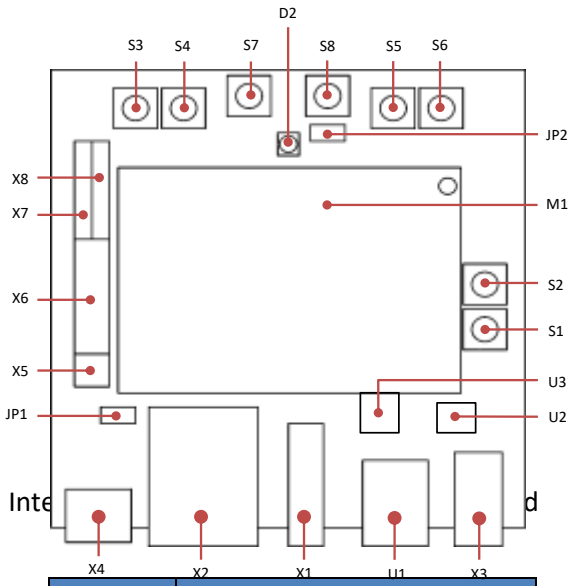
- Wolfson WM8524 stereo DAC for analog audio output
- Wolfson WM8804 S/PDIF transceiver for digital audio output

An RGB-LED is used for status indication:

- Green - indicating active audio output
- Blue - indicating network station mode
- Red - indicating network access point mode

The board allows to put the WLAN Modul into the standby mode.
It is also possible to measure the power consumption of the module by connecting an ampermeter.

The expansion header on the board can be used for easier integration into any customer design.
By using this interface customers can test for example other codecs with line-in interface.



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Label	Name
D2	RGB-LED
JP1	Current-Measure
JP2	Suspend
M1	HBM10
S1	HW_Reset
S2	SW_Reset
S3	Vol up
S4	Vol down
S5	Next
S6	Previous
S7	Stop
S8	Play/Pause
U1	SPDIF-Out
U2	WM8524
U3	WM8804
X1	USB Host
X2	Ethernet
X3	Audio Out
X4	Mini-USB (Power/Client)
X5	Audio Out
X6	Extension I2S/I2C/GPIO
X7	Debug and Application UART

Ordering information

Partnumber: 6211-EVAL
Description: WLAN HBM10/11 Evaluation board
Scope of delivery:

- Evalboard with HBM10 or HBM11 Modul and system software
- Documentation
- Cable set

MADE IN GERMANY

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