

## WLAN Audiomodul HBM10

*Stream music wirelessly and enjoy all the benefits that Wi-Fi has to offer*

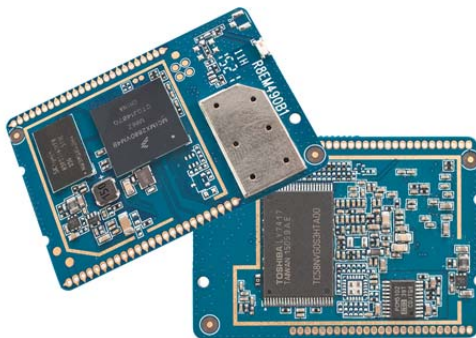
The HBM10 is a low-cost and powerful wireless audio System-on-Module (SoM) assembled on a small PCB. Its complete reference design drastically reduces the development time to start own applications on a custom carrier board.

The HBM10-ETH is additionally equipped with a 10/100 Mbps Ethernet transceiver for extended possibilities to setup your network.

The integrated and ready to use Linux-powered software stack supports audio streaming wirelessly with AirPlay®, UPnP, OpenHome and DLNA to all kind of home audio entertainment systems including home theatres, A/V receivers, wireless speakers and portable music players.

### Performance features

- CPU: Freescale i.MX280 (ARM9, 454MHz)
- Operating system: Linux 4.4
- Memory: 1Gb NAND Flash + 512Mb RAM
- Power supply: 5V@1A
- DAC: 24bit, 8 – 192kHz
- SNR: 112dB
- Boot time: ~15 Sec
- Electricity consumption: <3W
- Dimensions: 34x50mm



### Audio formats

- MP3
- AAC
- FLAC
- ALAC
- Vorbis/Opus
- WMA
- AC3
- APE/WavPack

### Container formats

- MP4
- MKV
- OGG
- WAV
- AIFF
- ASF

### Supported protocols

- AirPlay®
- UPnP
- OpenHome
- DLNA
- Multiroom over Songcast

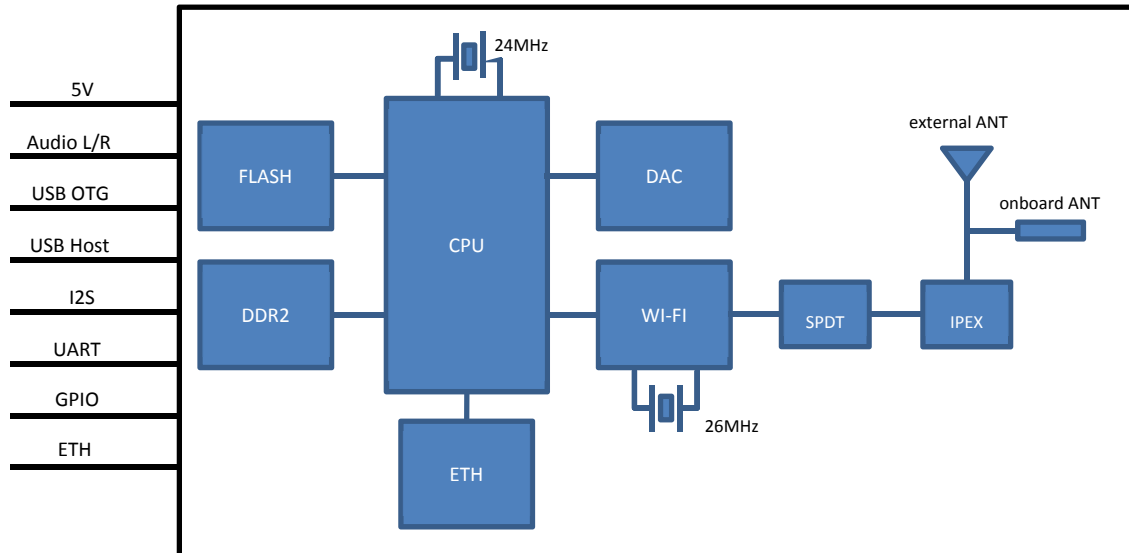
### Wi-Fi parameters

- IEEE 802.11bgn, 2.4 GHz
- Security: WPA2, WPA, WEP
- Encryption: TKIP and CCMP
- Operating modes: Access Point or Network Client
- On-board antenna (optional external antenna - IPEX/U.FL)

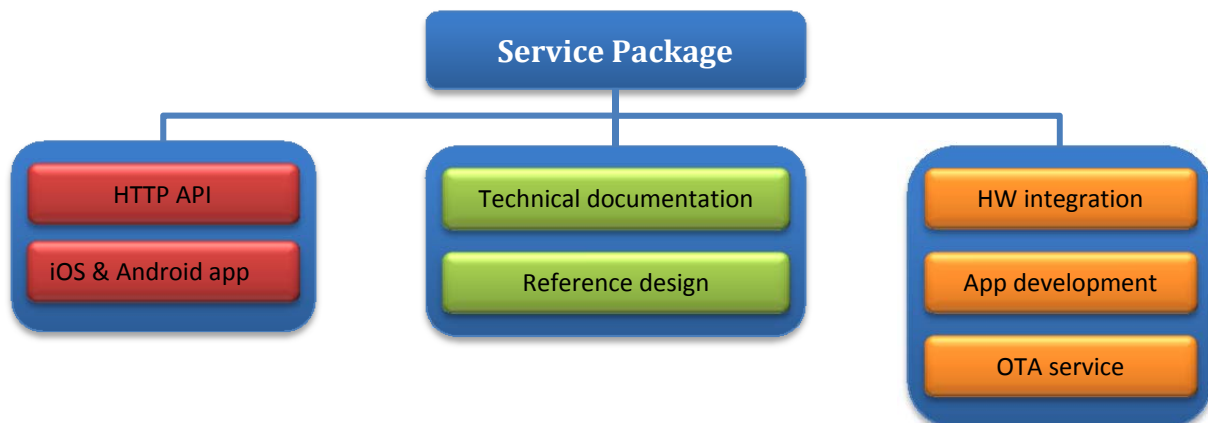
### Interfaces

- Ethernet: 1x
- UART: 1x
- USB: 1x OTG, 1x Host
- Audio: 1x I2S, 1x Line out L/R
- I2C: 1x
- Power: 1x5V (in), 1x3.3V (out)
- Reset: 1x hard reset, 1x factory reset
- GND: 4x
- LED: 2x
- ADC: 1x LRADC (12bit, 428KHz)
- ANT: 1x
- Keys: 7x (Multimedia, WLAN)
- GPIO: up to 14x freely configurable

## Block Circuit Diagram



## Service Package



### Service activities

- Firmware modification to match the customer hardware platform
- Demonstrator app for module configuration and integration into a local network
- Module and app customization to your requirements (like device name & logo, functionality, etc.)
- Firmware update over the air

### Ordering information:

Part# 6211-ETH HBM-10-ETH WLAN-audiomodul  
 Part# 6211-EVAL HBM-10-Evaluationboard

*If you have any questions about this product, please contact:  
 Ms Susanne Meinel  
 Tel: +49 (30) 54 94 72 61  
 E-mail: sam@litech.de*



Friedrich-Engels-Straße 35, D -13156 Berlin  
 Phone: +49 (030) 54 94 72 60  
 Fax: +49 (030) 54 94 72 44  
 E-Mail: LinTech@LinTech.de  
<http://www.LinTech.de>