LinTech

HBM11

Wireless Audio Streaming Module

High quality audio streaming system made in Germany

The HBM11 is a low-cost and powerful System-on-Module (SoM) especially designed for high quality audio streaming applications.

Its complete reference design drastically reduces the development time to start own applications on a custom carrier board.

The HBM11 highly integrated connectivity already includes all necessary interfaces – certified Wi-Fi, Bluetooth/BLE, Ethernet, analog and digital audio, digital display and serial interfaces – to minimize the need for external components.

The audio optimized Linux system supports audio streaming protocols with Spotify Connect, AirPlay®, UPnP, OpenHome, DLNA, Bluetooth to all kind of home audio entertainment systems including A/V receivers, wireless speakers and portable audio devices.

Main hardware features

- **CPU**: NXP i.MX 6ULL (Arm® Cortex®-A7)
- **NAND Flash**: 2Gb | 4Gb*
- **RAM**: 128MB | 256MB*
- **Wi-Fi + Bluetooth**: 2.4GHz | 2.4+5GHz
- **Ethernet**: 10/100Mb PHY with RMII
- **DAC**: WM8524 (24bit, 8 – 192kHz, SNR 112dB)
- **Power supply**: 5V@1A
- **Dimensions**: 34×50mm

Audio formats

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

Container formats

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

Supported protocols

- Spotify Connect
- AirPlay®
- UPnP
- OpenHome
- DLNA
- Multiroom over Songcast
- Bluetooth A2DP Sink

Supported playlists

- Radio by TuneIn
- TIDAL
- Qobuz

Networking

- IEEE 802.11 ac/b/g/n, 2.4 & 5 GHz
- 10/100 Mbps Ethernet
- Bluetooth 4.0
- WPS
- U.FL connector for external antenna

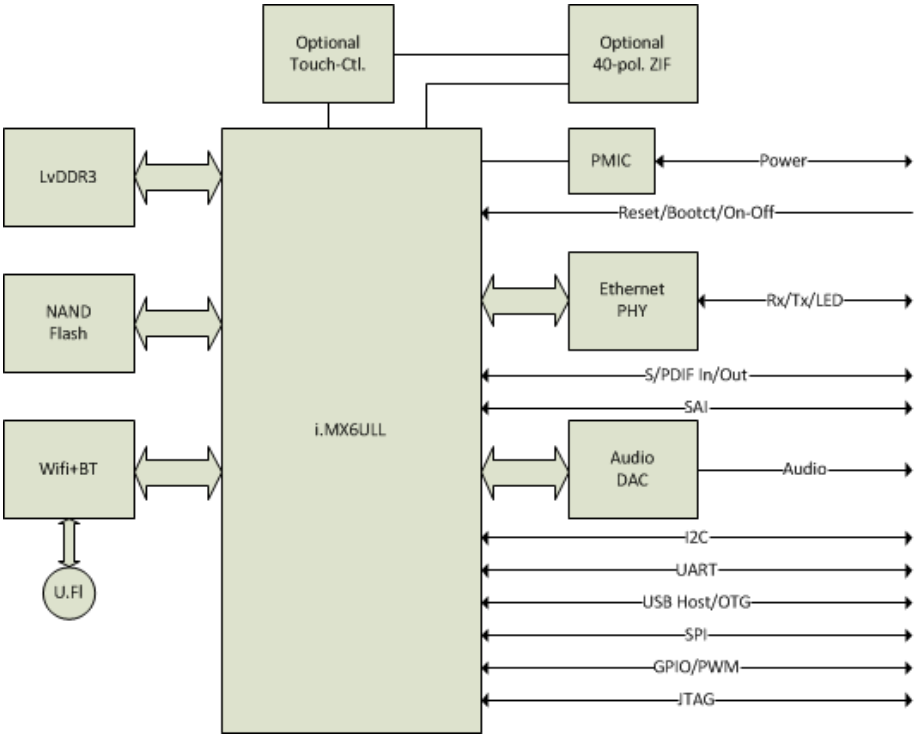
Audio Interfaces

- **Digital**: I2S
- **Analog**: Line-out (L/R)

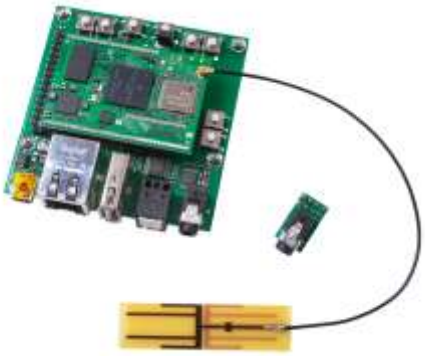
Other Interfaces

- Line-In (via I2S)
- UART
- USB (Host + OTG)
- I2C
- SPI
- Keys (Multimedia, WPS, Reset)
- LCD
- PWM
- GPIO

Block Circuit



HBM10/11 Evaluation Board



The HBM10/11 Evaluation Board enables quick and easy evaluation and development of audio applications based on the HBM11 audio module.

Ordering information

Part#.:6212 (HBM11 BT/ 2.4GHz Audio Module)

Part#.:6213 (HBM11 BT/2.4/5GHz Audio Module)

Part#.:6211-EVAL (HBM11 Evaluation Board)

Part#.:6211-EVAL-lineIn (Line-In Expansion for 6211-EVAL)

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