



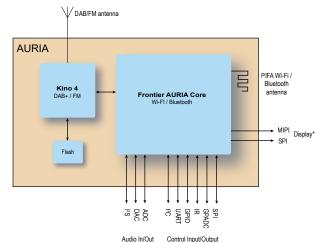
- Wireless speakers
- **Music systems**
- SmartRadios
- Internet radios



OVERVIEW

Frontier AURIA is a cutting-edge audio module designed to power the next generation of Bluetooth and Wi-Fi audio products. With a focus on delivering the highest quality Hi-Res audio, Bluetooth audio synchronisation across multiple speakers, low power consumption, portability and high security/privacy. AURIA has been designed and engineered to allow brands to create a whole new portfolio of products to compete in established markets and to enter new and emerging audio markets.

AURIA offers simple and straightforward integration into various audio products. The turnkey module, customisable SDK, rich I/O, comprehensive documentation and local technical support provided by our team allow for new products to be quickly bought to market with minimal development cost.



CONNECTIVITY

- Dual-core ARM A32 @ 1.2Ghz
- Integrated RAM and Flash memory
- Bluetooth 5.3 low energy (LE) audio
- Wi-Fi 6 (802.11ax) dual band
- I2S digital audio output
- DAC/ADC for analogue audio I/O
- DAB/FM*
- MIPI / SPI display interface*
- I/O I2C, SPI, UART, IR GPIO, GPADC
- · Onboard Wi-Fi Bluetooth printed PIFA antenna

FEATURES

- · Bluetooth LE Audio LC3 codec.
- Support for Auracast, highly dependable audio sync for multiple devices
- One touch party mode / stereo pair support
- Hi-Res audio support ALAC, FLAC @ 24bit 192 kHz*
- 128x32 OLED display support*
- · OKTIV iOS/Android app control
- Built-in audio DSP
- Spotify Connect
- AirPlay 2 with multiroom
- Podcast and listen again audio*
- Live Streaming Internet Radio*
- Wi-Fi Easy Connect*
- Battery management for extended battery life
- Pre-set favourite button support
- Customisable EQ
- RoHS compliant

*Future development

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AURIA BLOCK DIAGRAM

Bluetooth Low-Energy Audio and Wi-Fi Connected Module

NEXT GENERATION BLUETOOTH CONNECTIVITY

AURIA supports the latest Bluetooth technology with Bluetooth 5.3 Low Energy (LE) Audio. Users experience higher quality audio streaming and reduced power requirements, leading to longer battery life.

Bluetooth AuraCast enables AURIA to reliably synchronise broadcast audio to multiple receivers at the same time. This feature is perfect for creating a wireless multi speaker setup, for parties, listening to audio on Bluetooth headphones or broadcasting audio in public spaces.

Left and right AURIA speakers can wirelessly connect to form a stereo pair configured directly from the devices or via an external mobile phone. This is good to create a wireless stereo solution in a home audio setup or connecting soundbars to speakers.

A group of AURIA speakers can be synchronised by a Bluetooth sender; either an AURIA speaker or a suitable mobile smart device. The audio can stream from a range of sources, from your smart devices or directly via Wi-Fi from the internet, all controlled from your smart device.

Make your product stand out and offer

something different by adding an OLED display. Show setup information, connection status, now playing information or even song lyrics to wow your customers.

SECURITY AND PRIVACY

OPTIONAL OLED DISPLAY

Designed with security and privacy in mind and to be fully compliant with UK / EU cyber security laws coming into force.

AURIA ES2345 contains IP licensed from Imagination Technologies Ltd.



WIDE RANGE OF CONNECTIVITY OPTIONS

WI-FI CONNECTIVITY

Our modules offer dual-band 2.4/5Ghz Wi-Fi 6 (802.11ax) connectivity to enable highspeed and reliable connectivity in a busy home with lots of other Wi-Fi devices. This allows users to experience Hi-Res audio and advanced audio features well as reliable streaming of music, podcasts and internet radio streams.

LOW POWER CONSUMPTION

We recognize the importance of energy efficiency, especially in battery-powered devices. Our modules are optimized for low power consumption without compromising on audio quality, ensuring longer battery life for portable audio products.

ONE TOUCH AUDIO PLAY WITH PRE-SETS

Offer simple audio experiences by allowing songs, podcasts, live streams, playlists to be played or shared to other speakers with a single touch of a button. Wi-Fi means that a mobile device is not required to stream audio from.

SUSTAINABLE INNOVATION

The continuous development and improvement of the SDK allows for devices to receive updates and new features in the field-giving your product longevity in the market. There's also a new sustainable business model whereby you can offer a service to keep a customer's products working longer in the field.



















