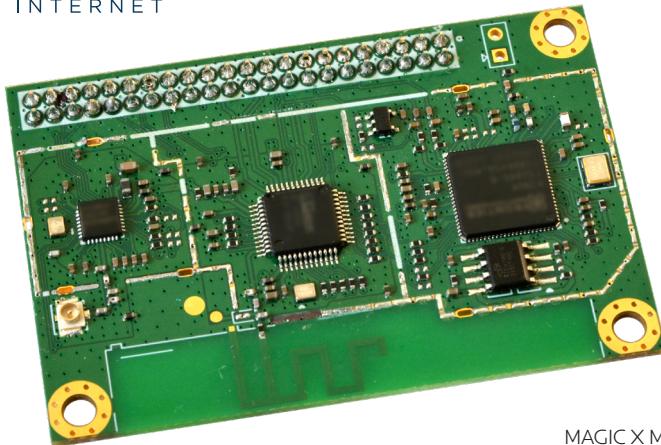


**SmartRadio™**  
FM • DAB+ • INTERNET



MAGIC X MODULE - 60 X 40 MM

## OVERVIEW

The Magic X FS2260 module is a complete hardware and software solution for wireless radio and speaker applications, for example, SmartRadio, Bluetooth, DAB/DAB+ and FM-RDS products. It provides a simple and low-cost solution for high-quality audio streaming.

Frontier Smart Technologies provides modules pre-installed with software which can be configured to customer requirements.

Frontier Smart Technologies provides the Magic X reference platform, which can be used to evaluate and assist development of a Magic X based system.

DAB and FM functionality is provided by Frontier Kino4, the industry leading solution, widely deployed with over 20 million units shipped.

## SOFTWARE FEATURES

- Full master operation – no external MCU required
- Bluetooth 5 streaming
  - AVRCP 1.5 support
  - Metadata and status information display
- DAB+ radio
  - DAB (MPEG1), DAB+ (AAC) decoding,
  - Slideshow support and DAB alarm consistent with latest ETSI standard
- FM radio
  - Includes RDS
- USB playback
  - Supports MP3 and AAC file decode
- Clock with auto update
- Dual alarm
- Software upgradable over the air or USB
- Audio post-processor on-module EQ

## APPLICATIONS

- Internet radios
- SmartRadios
- Wireless speakers
- Portable radio
- Clock radio

## CONNECTIVITY AND SPECIFICATION

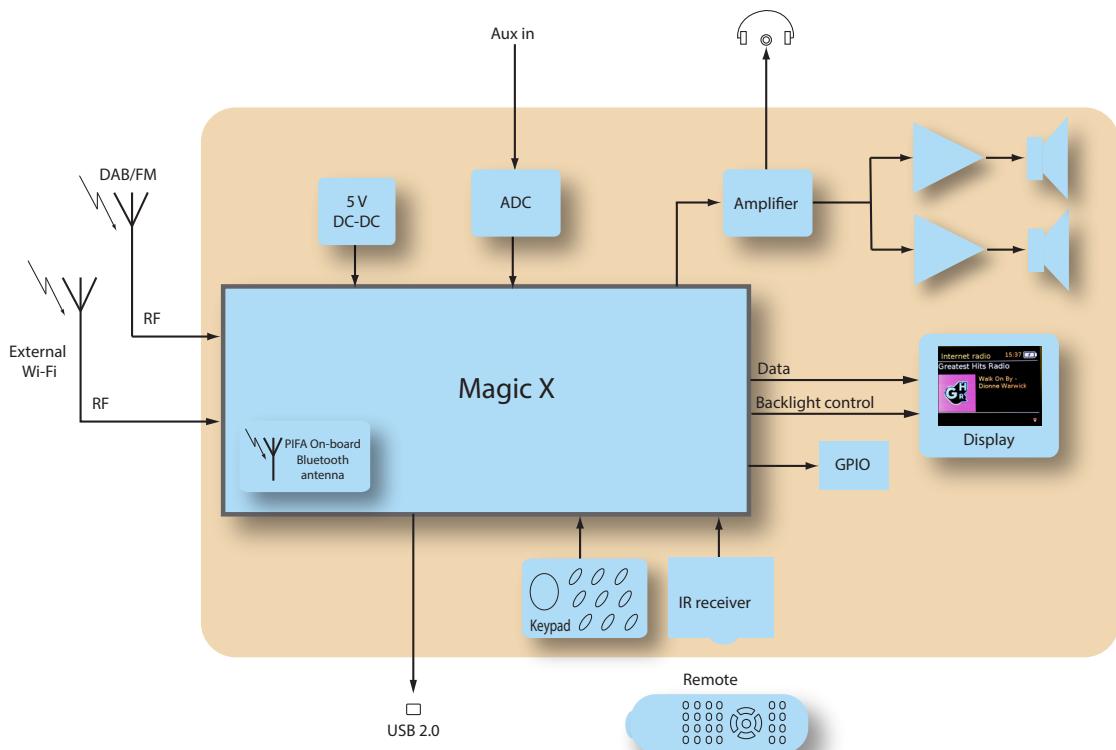
- 802.11b/g/n – WEP/WPA/WPA2/WPA3 security
- Bluetooth® v5
- USB 2.0 High Speed device/host
- On-module audio DAC
- Analogue audio L/R
- SPI TFT interface
- I2C interface
- UART interface
- IO for keyboard and rotary encoder
- Infrared remote control
- 1x Onboard PIFA antenna, supporting 2.4 GHz band (Bluetooth).
- Connector for external Wi-Fi antenna
- Single 5V power supply
- RoHS compliant
- Temperature range:
  - operation 0 to +70°C
  - storage -45 to +85°

# MAGIC X FS2260

Wi-Fi/DAB+/FM/Bluetooth Connected Audio Module

## SECURITY

- Internet Radio / Podcast requests are encrypted using TLS1.2
- Over-the-air (OTA) upgrades hosted by encrypted servers in the UK. Firmware update process is encrypted using SSL
- Magic X SDK operates without needing a user to enter any personal information
- No personal data is captured or transmitted. No private security encryption keys are stored



TYPICAL MAGIC X APPLICATION



MAGIC X NOW PLAYING DISPLAY



MAGIC X STANDBY CLOCK DISPLAY

## STANDARDS AND CERTIFICATION

Magic X, and MX SDK have been designed to operate seamlessly with the broadcast and network ecosystems. The Magic X module is tested to comply with the Radio Equipment Directive (RED) to allow end-products based on this platform to obtain certification for industry standards. For more information, contact Frontier Smart Technologies.

