

Wireless audio module for PA and tour guide systems

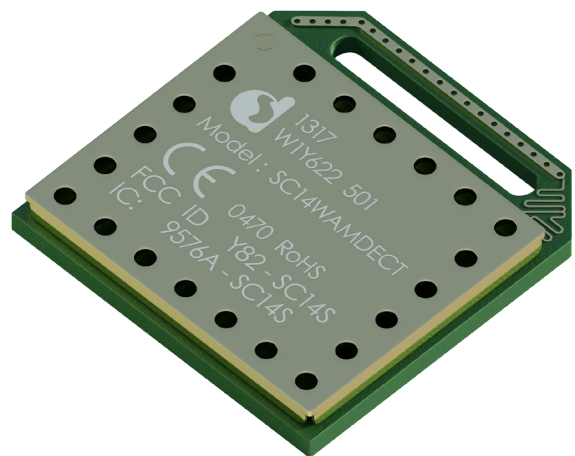
Drop-in solution delivers crystal clear sound, reliable transmission and easy set-up

Public address (PA) and tour guide (TG) systems share one major characteristic. They both need to communicate effectively with large groups in acoustically challenging environments. So what makes a good PA or TG system?

For the public, it's crystal-clear sound and reliable transmission, so they always get the message. Users want a solution that's easy to install and use. Meanwhile system developers are looking for short product creation cycles and the flexibility to address different environments and operational set ups.

Dialog helps you meet all these needs with the world's first DECT-based digital wireless networking solution specifically designed for PA and TG systems. It brings the high sound quality, interference-free, long-range communication and easy system installation and expansion of DECT to the PA and TG domain.

Delivered as a complete and pre-tested wireless audio module, it makes system creation as simple as possible. You don't need any radio frequency (RF) expertise or resources for design and production – or expensive RF testing equipment. To streamline your development cycle even further, a complete microphone reference design is available.



Features

- ▶ 2-channel digital wireless networking solution for PA and tour guide systems
 - ▷ Complete, fully tested drop-in module
 - ▷ Comprises all necessary hardware (including antenna) and software
- ▶ Uses tried-and-trusted DECT (1.9 GHz) wireless networking technology
 - ▷ Supports DECT, DECT 6.0 and JDECT
- ▶ Supports 12 kHz audio bandwidth
 - ▷ Latency of 14.2 ms
- ▶ Supports shared and personal mic set ups and multiple mics / speakers in one room

Benefits

- ▶ Excellent voice quality built-in
- ▶ No RF experience or resources needed for system development or production
- ▶ Reliable, interference-free and encrypted transmission
- ▶ Simple, hassle-free installation
 - ▷ No frequency planning required
 - ▷ Automatic channel selection
- ▶ Long range transmission: 50 m indoors and 300 m outdoors

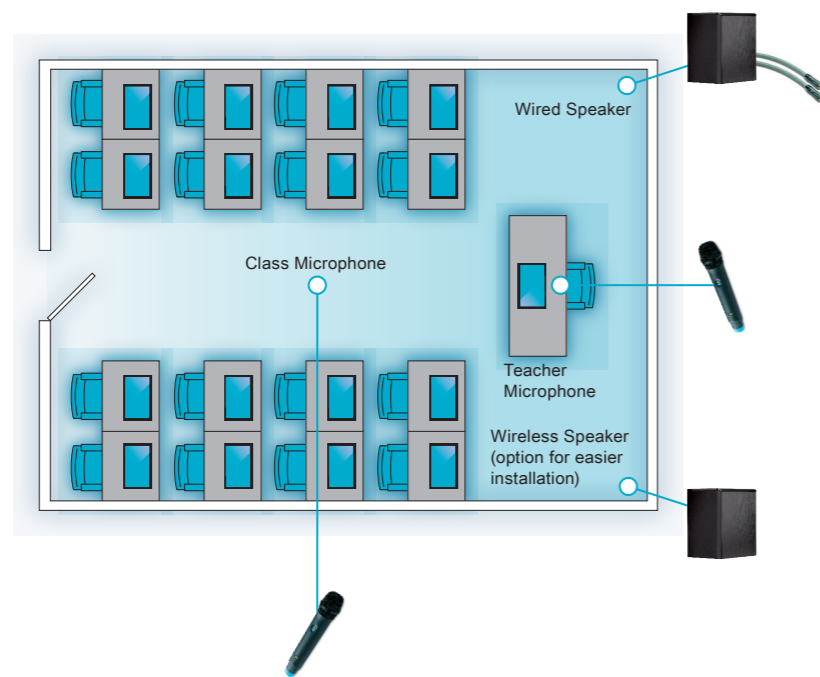
The natural wireless networking choice

DECT is the ideal wireless networking technology for PA and tour guide applications. Originally designed for cordless telephony, it delivers outstanding voice quality as standard. It can be used indoors and out, and its long range allows large areas to be covered with a single base station.

Moreover, DECT operates in a licensed, royalty-free frequency band and features automatic channel selection. This eliminates interference issues and guarantees reliable transmission. It also means multiple base stations can be used in one system and multiple systems installed in one location without worrying about frequency planning.

DECT's push-button registration makes it easy to set up and expand wireless systems. It also enables shared and personal microphone scenarios, so microphones can be assigned to specific rooms or individual people.

Already thoroughly field-proven in more than half a billion products, DECT has a track record few other wireless technologies can match.



Simplifying system creation

Our drop-in wireless audio module makes embedding the benefits of DECT into your PA or tour guide application simplicity itself. It is a complete wireless networking solution, integrating all necessary hardware and software in one compact package.

That includes:

- ▶ a powerful, multi-core DECT baseband processor
- ▶ RF transceiver
- ▶ power amplifier
- ▶ antenna
- ▶ complete protocol and application interface software
- ▶ application-specific software

All this is delivered in one type-approved, tested and TBR-6 / FCC certified module. So you don't need any in-depth knowledge of DECT protocols or RF design to create your system. Just drop a module into the base station speaker and another into the microphone(s).

Tailored functionality for your application

For PA systems, our solution allows two microphones to be connected wirelessly to an amplifier. It is ideal for portable systems as, unlike IR solutions, it is not affected by sunlight and the microphone can be left in the room or taken with when not in use. Meanwhile, the solution's tour guide (TG) mode allows one microphone to reach up to 128 listeners. It can be configured as a Language Interpretation System, allowing different listeners follow in their own language.



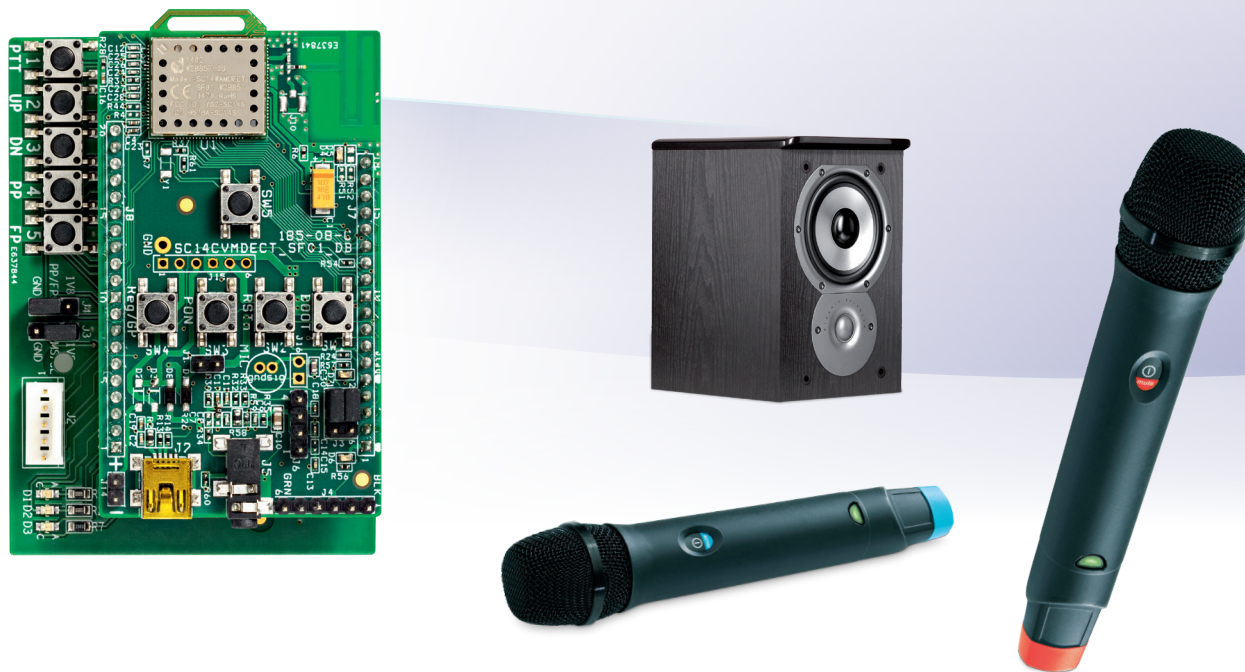
Wireless audio demo kit

Would you like to see the benefits DECT and our wireless audio modules bring to PA and tour guide applications for yourself? Our wireless audio system demonstration kit lets you do just that.

The kit includes all the hardware and software necessary to create a basic PA or tour guide system. This includes a standard radio microphone and a base station development board. The board can be connected in PA mode to a speaker amplifier or configured as a headset receiver in TG mode.

In addition, we can provide you with full documentation – including schematics, a complete Bill of Materials (BOM) and a functional description.

The ideal starting point for developing complete applications of any size, our demo kit helps you get to market fast with a range of easy-to-install and easy-to-use public address and tour guide systems.



Dialog Semiconductor worldwide sales offices - www.dialog-semiconductor.com

United Kingdom
Phone: +44 1793 757700

The Netherlands
Phone: +31 73 640 88 22

Japan
Phone: +81 3 5425 4567

Hong Kong
Phone: +852 2607 4271

Korea
Phone: +82 2 569 2301

Germany
Phone: +49 7021 805-0

North America
Phone: +1 408 845 8500

Taiwan
Phone: +886 281 786 222

Singapore
Phone: +65 648 499 2

This publication provides outline information only, which unless agreed by Dialog Semiconductor may not be used, applied or reproduced for any purpose, or be regarded as a representation relating to products. Please refer to Dialog standard supply terms on the company website (www.dialog-semiconductor.com)

© Dialog Semiconductor 2015, All rights reserved. 0315HPVC