

# Wireless Audio Link IC

## BH1414K

The BH1414K is a FM stereo transmitter IC that uses a simple configuration. This IC consists of a stereo modulator for generating stereo composite signals and a FM transmitter for broadcasting a FM signal on the air. A high S/N ratio and good timbre transmitter circuit can be composed with a few components. It is available for many applications due to the varieties of setting such as transmission output by serial data input.

### ●Applications

CD changer, Car TV, Car navigation, Wireless speakers, Personal computer (sound board), Game machine

### ●Features

- 1) It is possible to improve the timbre because it has the pre-emphasis circuit, limiter circuit, and the 19kHz/38kHz low-pass trap filter circuit.
- 2) Built-in pilot-tone system FM stereo modulator circuit.
- 3) The transmission frequency is stable because it has a PLL system for the FM transmitter circuit.
- 4) PLL data input (CE, CK, DA) by serial input.
- 5) It is possible for input level setting, monaural operation and output ON/OFF control by serial input.
- 6) It is possible for the transmission output control.

### ●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V <sub>CC1</sub>	+9.0	V
	V <sub>CC2</sub>	+10.0	
Power dissipation	P <sub>d</sub>	500	mW
Storage temperature range	T <sub>stg</sub>	-55 to +125	°C

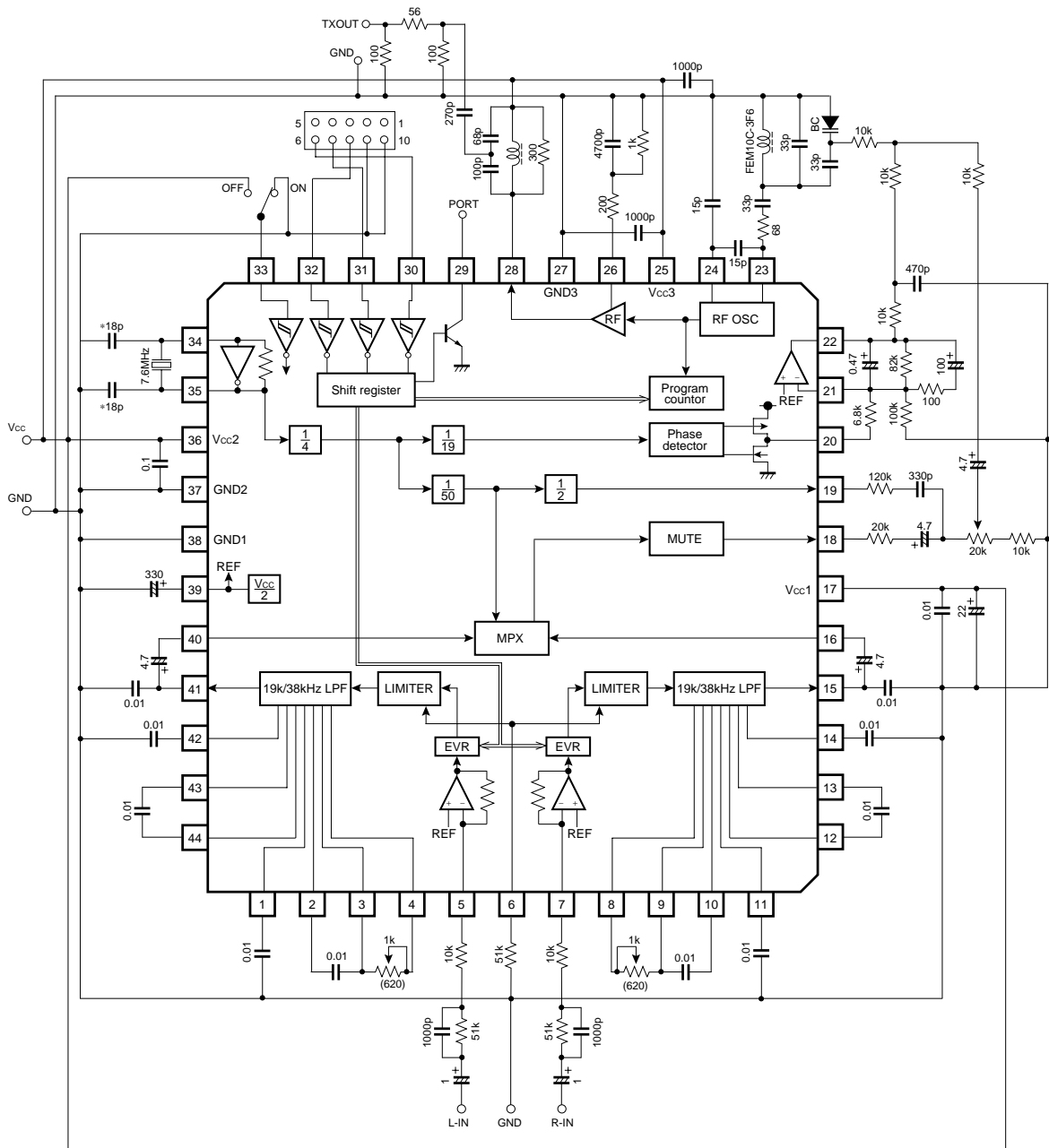
\* Reduced by 5mW for each increase in Ta of 1°C over 25°C.

### ●Recommended operating conditions (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Operating supply voltage	V <sub>CC</sub>	4.5	–	5.5	V
Operating temperature range	T <sub>opr</sub>	-40	–	+85	°C
Audio input level	V <sub>IN-A</sub>	–	–	500	mVrms
Audio input frequency	f <sub>IN-A</sub>	20	–	15k	Hz
Transmission frequency	f <sub>TX</sub>	75	–	110	MHz

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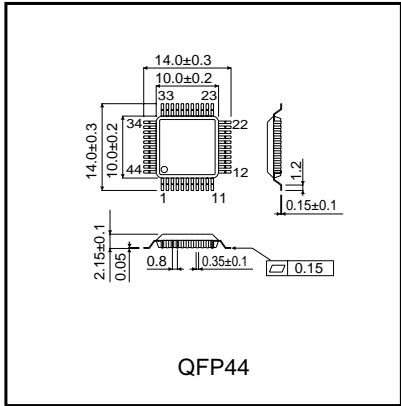
●Application example



\*The constant of the capacitor must be determined by the agreement with a crystal maker.

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●External dimensions (Units : mm)



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