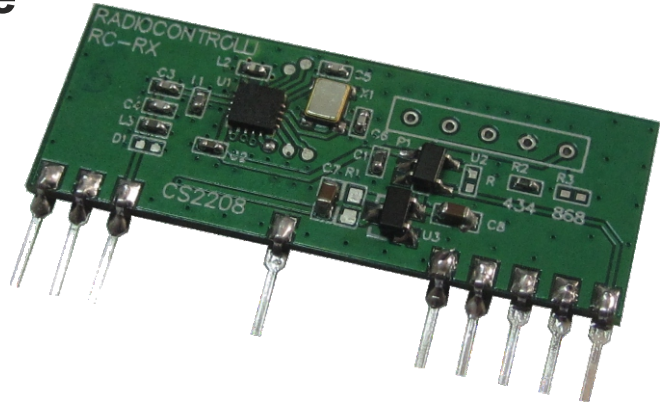


AM Superhet Receiver Module

is an AM Radio Receiver Module with PLL Synthesizer and Crystal oscillator.
 Single line package with power down mode.



Standard versions:

RC-RXASK-433 =====> Frequency 433.92MHz

RC-RXASK-868 =====> Frequency 868.35MHz

Available versions :

RC-RXASK-433.42 ==> Frequency 433.42MHz

RC-RXASK-434.15 ==> Frequency 434.15MHz

RC-RXASK-434.50 ==> Frequency 434.50MHz

RC-RXASK-868.95 ==> Frequency 868.95MHz

RC-RXASK-869.50 ==> Frequency 869.50MHz

Possible versions :

On request we can customize the frequency value :

- *From 433.00 MHz to 435.00 MHz with step of 0,01 MHz*
- *From 867.00 MHz to 870.00 MHz with step of 0,01 MHz*

Applications :

- Wireless security systems
- Home and building automation
- Automatic Measure Reading
- Wireless Sensor Network

Technical Characteristics

Characteristics		MIN	TYP	MAX	UNIT
V _{CC}	Supply Voltage	4.5		5.5	Vdc
I _s	Supply Current (Operation mode)		5.0	6.0	mA
I _s	Supply Current (Shut down mode)			100	nA
F	Frequency		(*)		MHz
D	Max Data Rate			4.8	Kbit/s
S	RF Sensitivity	-108	-110	-112	dBm
B	3dB Bandwith		± 150		KHz
L	Level of emitted spectrum			70	dBm
T	Power Up Time (from Power to stable data)			8	ms
T1	Power Up Time1 (from PD to stable data)			5	ms
TE	Operating Temperature Range	-20		+70	°C

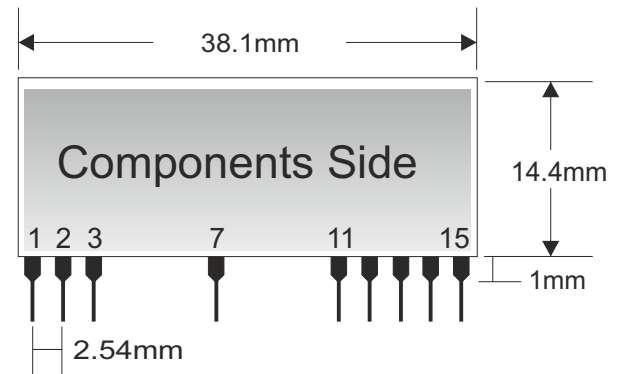
(*) 433.92MHz (RC-RXASK-433) 433.42MHz(RC-RXASK-433.42) 434.15MHz(RC-RXASK-434.15) 434.5MHz (RC-RXASK-434.5)
 868.35MHz (RC-RXASK-868) 868.95MHz(RC-RXASK-868.95) 869.50MHz(RC-RXASK-869.5)

Pin Description

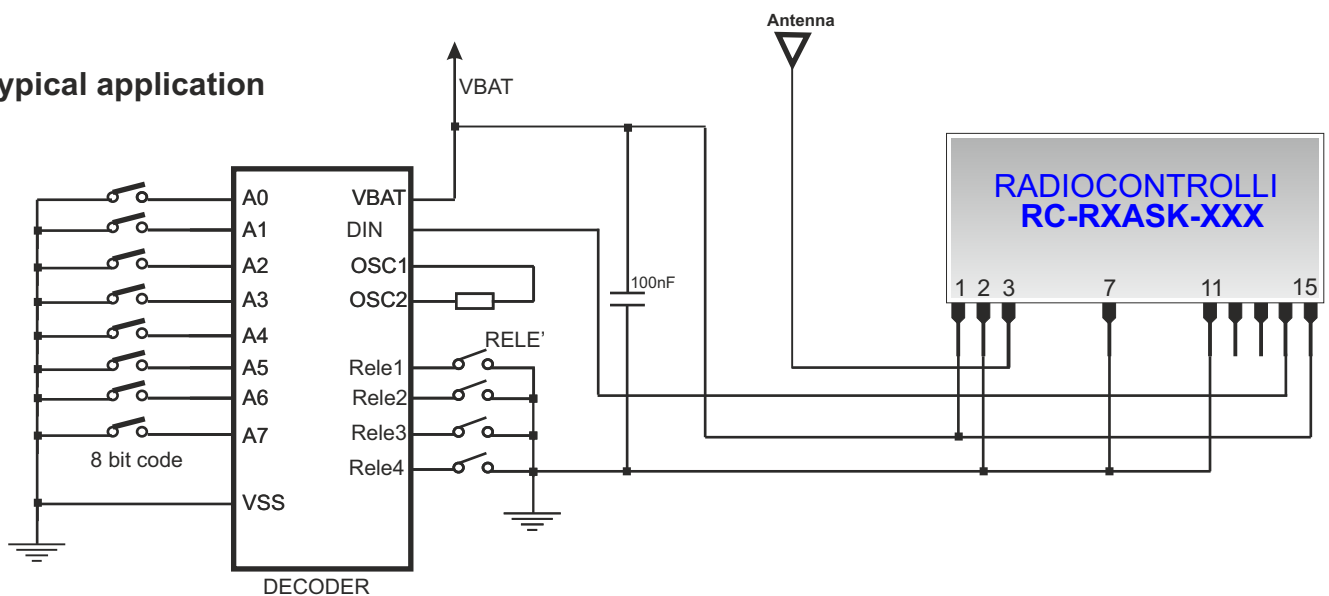
Pads	Name	Description
1	VCC	Vcc Power
2	GND	Ground
3	IN	Antenna
7	GND	Ground
11	GND	Ground
12	NC	Not connected
13	NC	Not connected
14	OUT	Data Out
15	PD	Power down

PD = LOW ----> RX OFF
 PD = HIGH ----> RX ON

Mechanical Dimensions



Typical application



Receiver Connection Guideline

- 1) The receiver module must be powered from a regulated voltage.
- 2) In proximity of the receiver module it is necessary to insert a ceramic decoupling capacitor (100nF).
- 3) The ground plane must be completely encircle the entire receiver in particular the area of the Antenna connection (we recommend a minimum of 40-50mm radius).
- 4) The 50ohm connection should be as short as possible.
- 5) For a pcb with 1.6mm thickness, the track "50ohm connection" must be 2.5mm, this track should be separated from the GND for 2mm.
- 6) On the opposite side of 50ohm connection should be a ground plane.
- 7) Keep the receiver module away from other components for more than 5mm.
- 8) Close to the 50ohm connection there must be no component at least for 5mm.

