

## Product Discontinuation Notice

Date: Dec. 21, 2021

PDN. No: 2112002

*Circuit Design will discontinue the following product*

**Product:**

CDP-RX-05M-R 869 MHz A

**Reason:**

CDP-RX-05M-R 869 MHz A contains several obsolete components. Circuit Design decided to re-design the receiver, which is equivalent to the CDP-RX-05M-R 869 MHz A.

The re-designed model will have new model name CDP-RX-07M 869 MHz.

**Replacement product:**

CDP-RX-07M 869 MHz

- This model is equivalent to the CDP-RX-05M-R 869 MHz A. See comparisons on the following pages.

**Schedule:**

- Last order date for the CDP-RX-05M-R 869 MHz A is end of April 2022.  
Last shipment date from Circuit Design is end of April 2023.  
\* Due to component availability, Circuit Design may not be able to accept all quantities ordered.
- CDP-RX-07M 869 MHz  
Sample is available on request.  
The production starts in third quarter of 2022.

**Stock Status**

Contact Circuit Design, Inc.

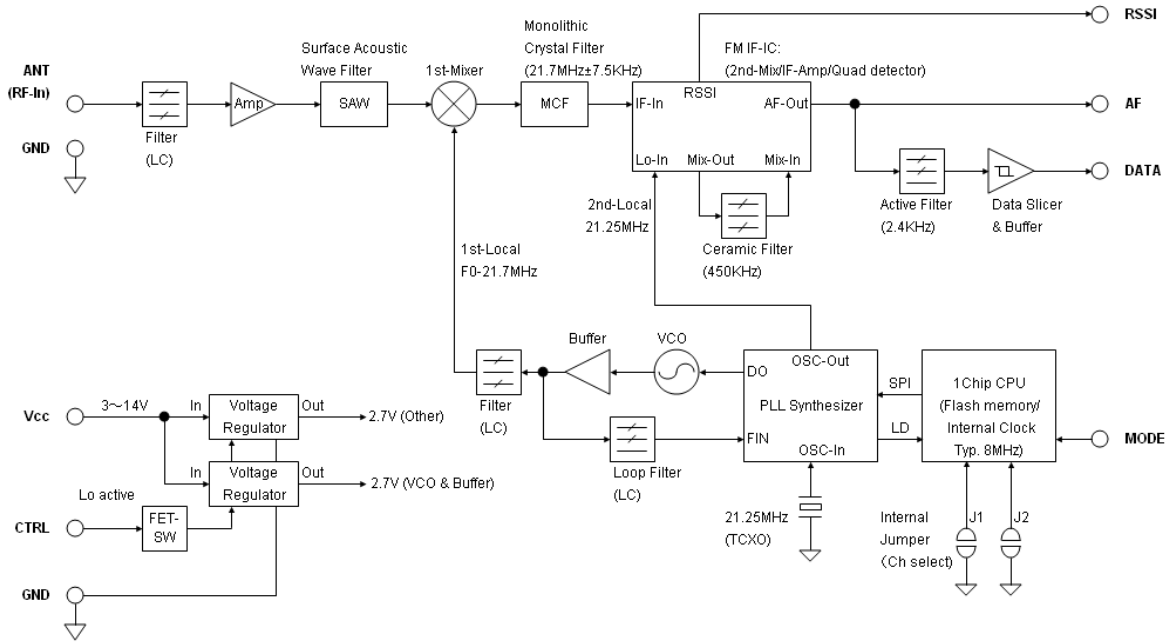
Comparison between CDP-RX-05M-R 869 MHz A and CDP-RX-07M 869 MHz specifications

Item	Specification	
	CDP-RX-05M-R 869 MHz A	CDP-RX-07M 869 MHz
Applicable standard	EN 300 220	
Receiver Category	Category 1.5	
Communication form	One way	
Oscillation system	Crystal based PLL oscillation	
Number of channels	4	
Frequencies MHz	CH3*	869.750 *
	CH2	868.300
	CH1	869.800
	CH0	869.925
* Factory default frequency channel setting.		
For frequency setting, the internal Jumper 1 and 2 are used. (For details, refer to PIN DESCRIPTION)		
Frequency stability	< +/- 2.5 ppm (-10 to + 60 °C, reference frequency = 25 °C)	
Aging rate	< +/- 1 ppm / Year	
Initial frequency tolerance at delivery	< +/- 1.5 ppm (within 1 year after the final adjustment)	
Pulse width	208 us - 20 ms	
Data rate (FSK)	100 - 4,800 bps	
Operating temperature range	-20 to + 65 °C	
Demodulation	FM Narrow	
Sensitivity (12 dB/SINAD at CCITT filter)	-116 dBm	
Sensitivity (BER <0.1 %)	-111 dBm	
Selectivity	+/-5 kHz at -6 dB point	
Adjacent CH selectivity	45 dB	
Spurious radiations	< -60 dBm	
Distortion (AF output)	< 5 % at 1 kHz	
S/N ratio (AF output)	40 dB	
AF Output level (Fm = 1 KHz)	-10.5 dBm (Fmod = +/- 3 KHz)	
Data output	Digital output, pulled up to Vcc (22 k ohm)	
Other outputs	RSSI, AF	
Supply Voltage	3.0 to 14 V DC	
Supply current (Typ. at 3.0 V)	28 mA	23 mA typ
I/O terminals	Ant, Gnd, Vcc, Dataout, AFout, RSSIout, Power Control	
Dimensions	36 X 26 X 8 mm 7.5 cc	
Weight	13 g	

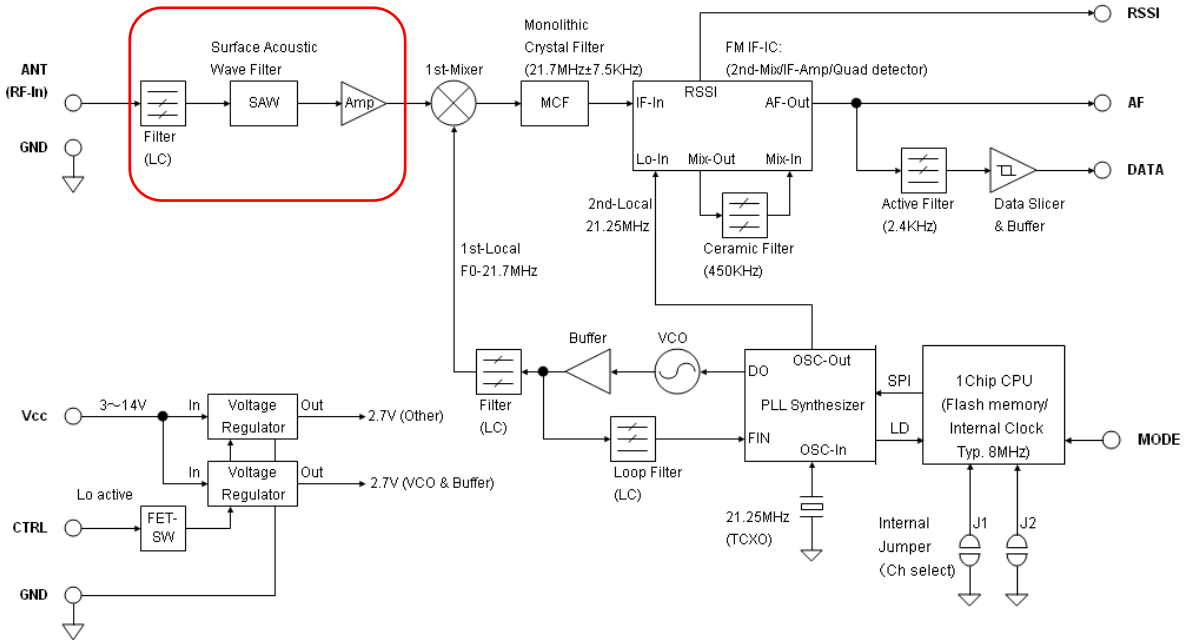
## Comparison between CDP-RX-05M-R 869 MHz A and CDP-RX-07M 869 MHz pin description.

Pin-No.	Pin-Name	I/O	CDP-RX-05M-R 869 MHz A Equivalent circuit	CDP-RX-07M 869 MHz Equivalent circuit
CN1-1	DATA	O		same
CN1-2	AF	O		same
CN1-3	RSSI	O		
CN1-4	CTRL	I		same
CN1-5	VCC	-		
CN1-6	GND	-		
CN2-1	ANT			
CN2-2	GND	-		
	JP1	I		
	JP2			

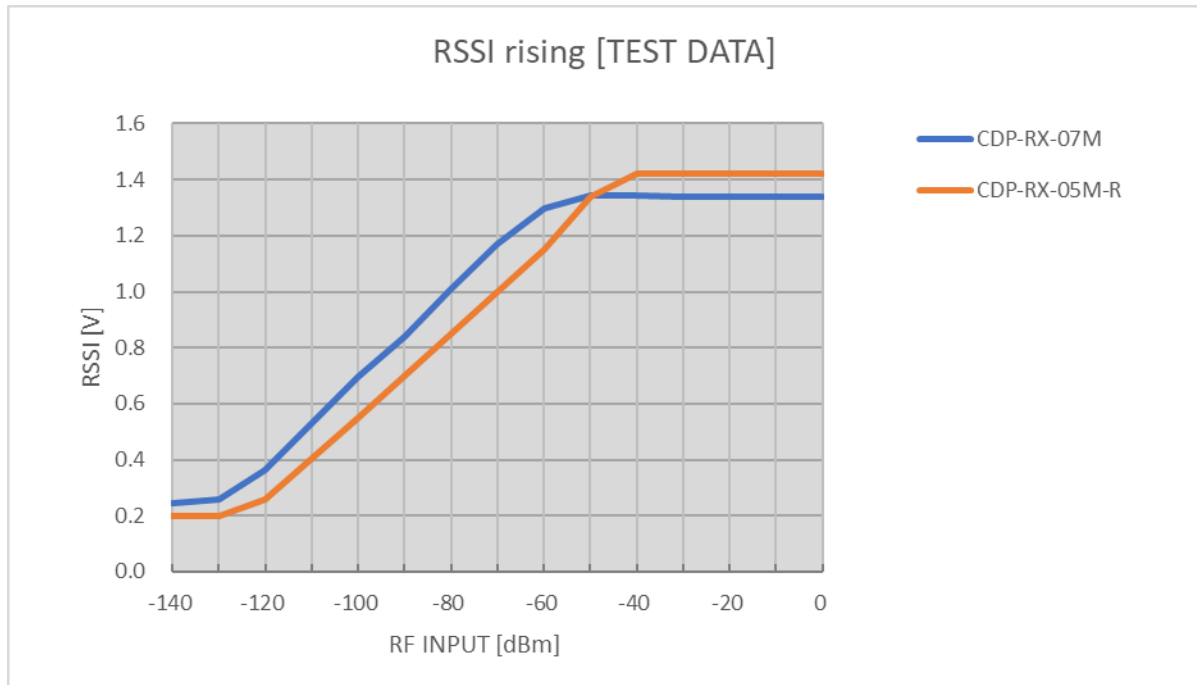
**CDP-RX-05M-R 869 MHz A Block Diagram**



**CDP-RX-07M Block Diagram**



**Comparison of the RSSI characteristics of the CDP-RX-07M 869 MHz to the CDP-RX-05M-R 869 MHz A**



RSSI characteristics for the CDP-RX-07M 869 MHz will differ from the CDP-RX-05M-R 869 MHz A. Instead it will be the same as CDP-RX-07M 434 MHz.