



DESCRIPTION

PT2579 is a Radio Data System Demodulator IC utilizing CMOS Technology specially designed for radio data system applications. The RDS data signal (RDDA) and the RDS clock signal (RDCL) are provided as outputs for further processing by an ideal decoder / microcontroller. Anti-aliasing Filter (2nd order), 57KHz band pass filter (8th order), reconstruction filter (2nd order), clocked comparator with automatic offset compensation, biphase symbol decoder, differential decoder, and signal quality detector are all built into a single chip having the highest performance and reliability. Pin assignments and application circuit are optimized for easy PCB layout and cost saving advantages.

FEATURES

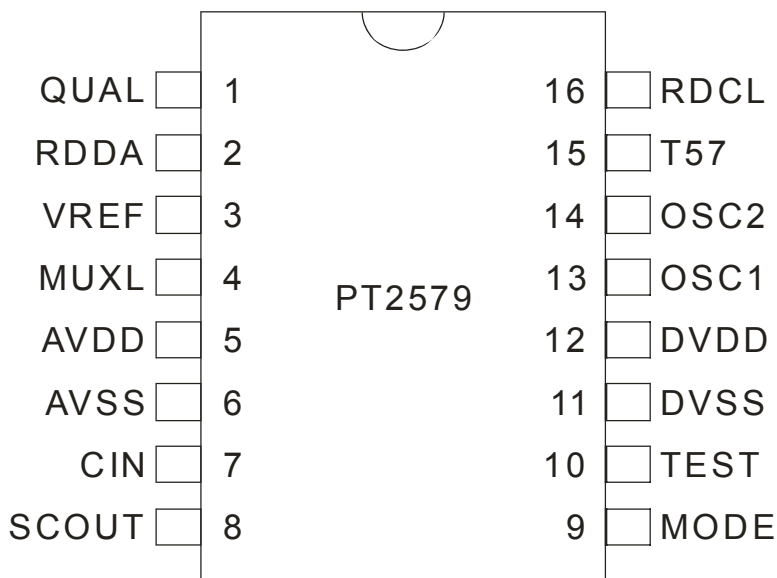
- CMOS Technology
- Low Power Consumption
- Anti-Aliasing Filter (2nd Order)
- Reconstruction Filter (2nd Order)
- 57KHz Band-Pass Filter (8th Order)
- 57KHz Carrier Regeneration
- Differential Decoder
- Signal Quality Detector
- Subcarrier Output
- Selectable 4.332 / 8.664MHz Crystal Oscillator with Variable Dividers
- Synchronous Demodulator for 57KHz Modulated RDS Signals
- Clocked Comparator with Automatic Offset Compensation
- Clock Generation with Lock on Biphase Data Rate
- Biphase Symbol Decoder with Integrate and Dump Functions
- Available in 16 pins, DIP or SOP

APPLICATIONS

- Car Radio
- Home Stereo Tuner



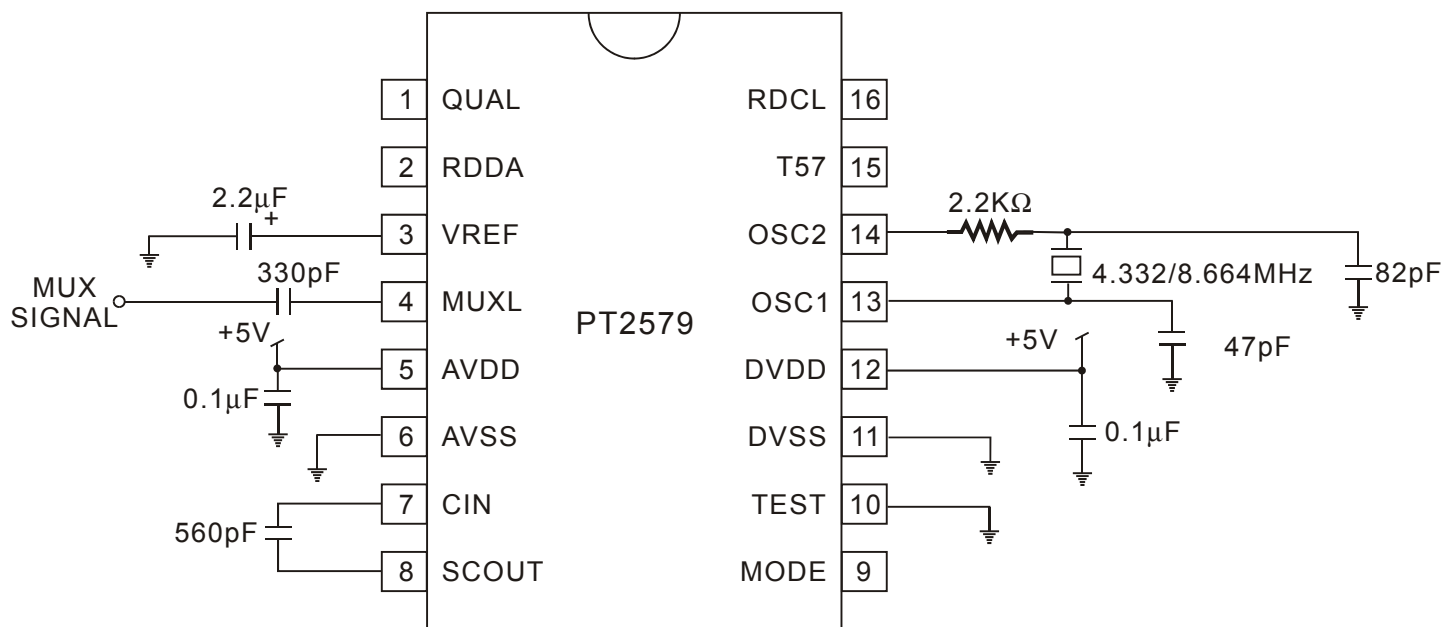
PIN CONFIGURATION



PIN DESCRIPTION

Pin Name	I/O	Description	Pin No.
QUAL	O	Quality Indicator Output Pin	1
RDDA	O	RDS Data Output Pin	2
VREF	-	Reference Voltage	3
MUX	I	Multiplex Signal Input Pin	4
AVDD	-	Analog Supply Voltage (+5V)	5
AVSS	-	Analog Ground Pin (0V)	6
CIN	I	Subcarrier Input Pin to the Comparator	7
SCOUT	O	Reconstruction Filter Subcarrier Output Pin	8
MODE	I	Oscillator Mode / Test Control Input Pin	9
TEST	I	Test Pin	10
DVSS	-	Digital Ground Pin (0V)	11
DVDD	-	Digital Supply Voltage (+5V)	12
OSC1	I	Oscillator Input Pin	13
OSC2	O	Oscillator Output Pin	14
T57	O	57KHz Clock Signal Output Pin	15
RDCL	O	RDS Clock Output Pin	16

APPLICATION CIRCUIT



Note:

Two crystal frequencies may be used via the MODE pin. Please refer to the table below.
For the 4.332MHz Crystal, it is recommended to use TXC 6A04300098 or a component with the same specifications.

MODE Pin State	Crystal Clock Frequency (MHz)
LOW	4.332
HIGH	8.664



ORDER INFORMATION

Valid Part Number	Package	Top Code
PT2579 (L)	16 pins, DIP, 300mil	PT2579
PT2579-S (L)	16 pins, SOP, 300mil	PT2579-S
PT2579-SN (L)	16 pins, SOP, 150mil	PT2579-SN
PT2579-X (L)	16 pins, SSOP, 150mil	PT2579-X

Notes:

1. (L), (C) or (S) = Lead Free.
2. The Lead Free mark is put in front of the date code.