



XC2028

Product Brief

XC2028

Ultra Small, Analog Terrestrial and Cable TV Receiver



OVERVIEW

The XC2028 is a single-chip analog TV tuner that combines both tuning and demodulation functions in one small package. All analog TV formats transmitted worldwide in the 42-864MHz band on either cable or terrestrial broadcast channels are supported. A high performance integrated filter and DSP help the XC2028 eliminate external SAW filters to reach higher performance. Xceive's breakthrough patent-pending technology provides a powerful combination of high dynamic range with a large tunable range uniquely enabling superior pictures.

FEATURES:

World's smallest Analog TV tuner:

- Fully integrated RF-to-Baseband
- No metal shield required

Digital picture carrier recovery:

- Alignment-free
- Quartz-stable and accurate
- No external tunable parts

Built-in VIF/SIF circuit

Supports all analog TV standards:

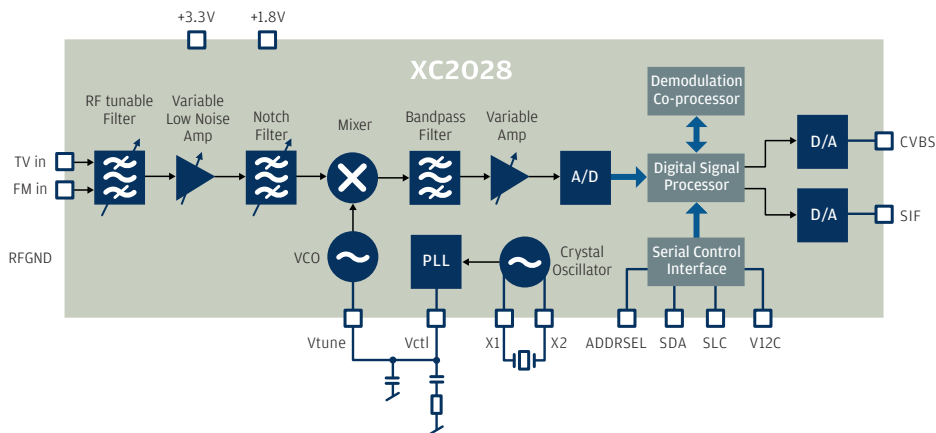
- NTSC, PAL, SECAM
- CVBS, SIF and audio output

IIC bus controlled

Ultra small 48-pin QFN package,
Leadfree

SPECIFICATIONS

Outline Dimensions	7 x 7 x 0.85mm
Supply Voltage (DC)	1.8V, 3.3V
System setting time	5ms
Input Impedance	75Ω
VSWR (typical)	2.5
Noise Figure (typical)	6dB
Phase noise @10KHz (typical)	-85dBc/Hz
CTB	-63dBc
Image rejection	60dB
AGC range	80dB
Video S/N (unweighted)	48dB
Frequency range	42 - 864MHz
XC2028 Power Dissipation	< 1.2W



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Currently supported television standards

System	Color Standard	Audio Standard (identifier)
I	PAL	FM + NICAM (I)
B	PAL	FM + FM (B/G-A2)
B	PAL	NICAM + FM (B/G-NICAM)
G	PAL	FM + FM (B/G-A2)
G	PAL	NICAM + FM (B/G-NICAM)
L	SECAM	AM +NICAM (L/DK3)
L'	SECAM	AM +NICAM (L/DK3)
D/K	PAL	FM + FM (DK2)
D/K	PAL	FM + NICAM (DK2)
D/K	SECAM	FM + FM (DK1)
D/K	SECAM	FM + FM (L/DK3)
M/N	NTSC/PAL	FM + FM (M/N-A2)
M/N	NTSC/PAL	BTSC (M/N-BTSC/EIAJ)
M/N	NTSC/PAL	EIAJ (M/N-BTSC/EIAJ)
M/N	NTSC/PAL	MTS Mode ¹ (M/N-BTSC/EIAJ)

¹ In this mode the XC2028 demodulates the BTSC/EIAJ carrier and outputs the corresponding composite sound signal

ONLY XCEIVE TUNERS OFFER:

Xceive ClearView

Delivers an image that's sharper and cleaner than any conventional CAN tuner, even in the highest-end TVs.

QuickTune

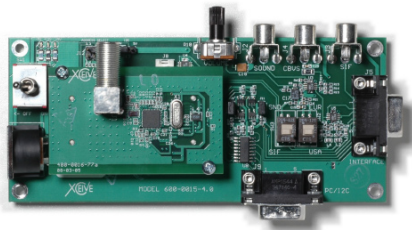
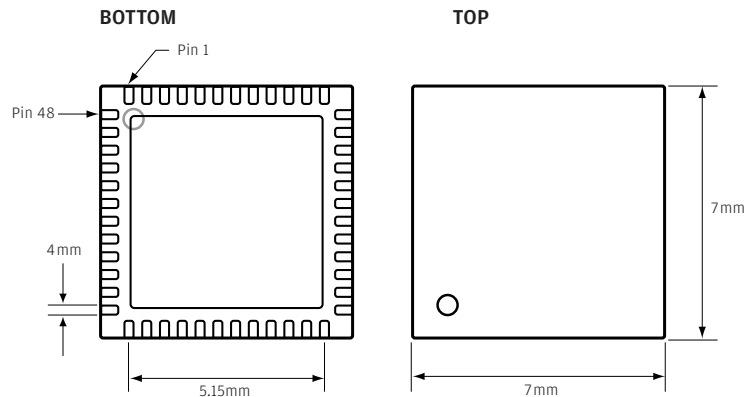
Technology for ultra-fast switching between channels-making channel surfing more enjoyable and general channel scanning far faster.

ChannelVista™

The first of its kind, multiple Picture-In-Picture, live on screen. Thanks to Xceive QuickTune technology, this breakthrough feature for the latest TVs requires only one tuner.

The package type is QFN48 (48 pins)

The thickness of the package is 0.8mm Minimum and 0.9mm Maximum.



EVALUATION BOARDS

Xceive makes available evaluation boards for select customers. Each evaluation kit contains a test module, detailed application notes to guide installation and software. To inquire about receiving evaluation boards, contact us at: sales@xceive.com



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