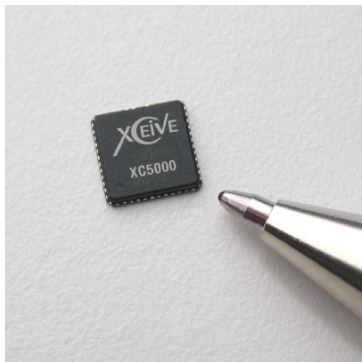




# XC5000 Product Brief

## XC5000 Ultra Small, Hybrid Terrestrial and Cable TV Receiver



### OVERVIEW

The XC5000 is the world's most highly integrated Silicon TV Tuner specifically designed for flat panel televisions. This next-generation tuner offers state-of-the-art performance where both analog and digital reception is required. The XC5000 is the only Hybrid Global TV Tuner with an on-board DSP controller. This unique architecture achieves world-class tuner performance for all major analog and digital broadcast television standards.

In addition to the DSP, on-board filters are reconfigured to meet the different TV standards requirements. Gain blocks are adjusted to maximize performance regardless of the external environmental changes on the signal. To improve overall reliability in tolerance specifications and yield, the DSP controller minimizes tuner-to-tuner performance variations.

### FEATURES:

World's smallest Hybrid TV tuner:

- Fully integrated RF-to-Baseband
- No metal shield required
- Alignment-free
- No external tunable parts

Built-in VIF/SIF circuit

Supports all analog TV standards:

- NTSC, PAL, SECAM
- CVBS, SIF or mono-sound output
- Works well for non-standard signals

Supports all digital TV standards:

- ATSC, OpenCable
- DVB-T, DVB-C
- ISDB-T, DMB-TH

Quick tuning supports ChannelVista™

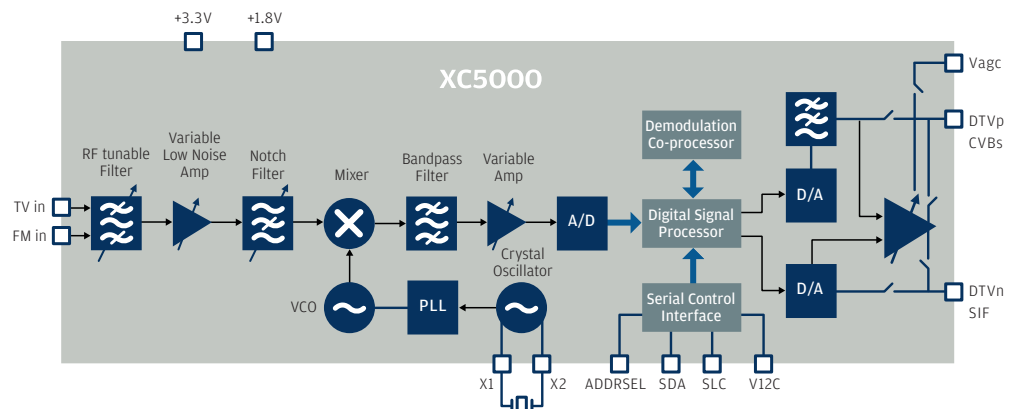
Easily monitors signal performance

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	75ohms
VSWR (typical)	2.5
Noise Figure (typical)	5dB
Phase noise @10KHz (typical)	-95dBc
CTB	-63dBc
Image rejection	65dB
AGC range	90dB
Video SNR (unweighted)	54dB
Frequency range	42 - 864MHz
Power Dissipation	1.0W



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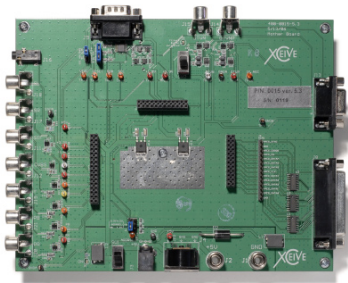
## Ultra Small, Hybrid Terrestrial and Cable TV Receiver

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 <sup>1</sup> (M/N-BTSC/EIAJ)
DTV6	6MHz - ATSC/DVB-C/DVB-T/ISDB-T/DOCSIS	
DTV7	7MHz - DVB-C/DVB-T	
DTV8	8MHz - DVB-C/DVB-T	

The XC5000 is compatible with most DTV standards.

<sup>1</sup> In this mode the XC5000 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

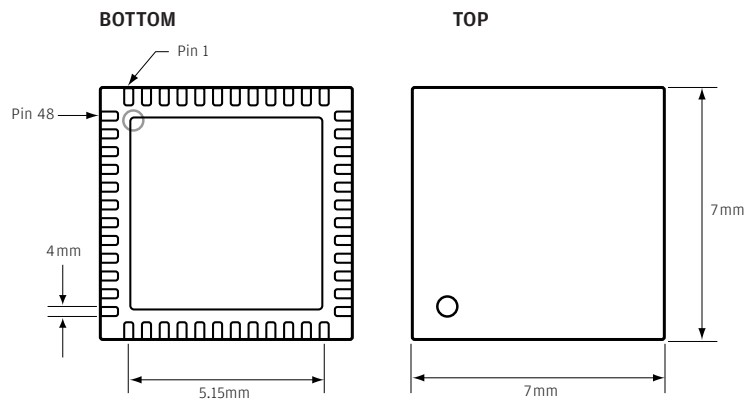
Technology for ultra-fast switching between channels-making channel surfing more enjoyable and general channel scanning far faster.

#### 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](mailto:sales@xceive.com)



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