



S I L I C O N L A B S

Introducing the Si473x Multiband
Receiver Family

Silicon Laboratories Broadcast Portfolio

- ◆ AM/FM Radio Receivers and FM Transmitters

- High-performance broadcast radio components

- ◆ SiRX™ Satellite Receivers

- RF front-end for direct broadcast satellite (DBS)

- ◆ XM Satellite Tuners

- Programmable satellite radio tuners



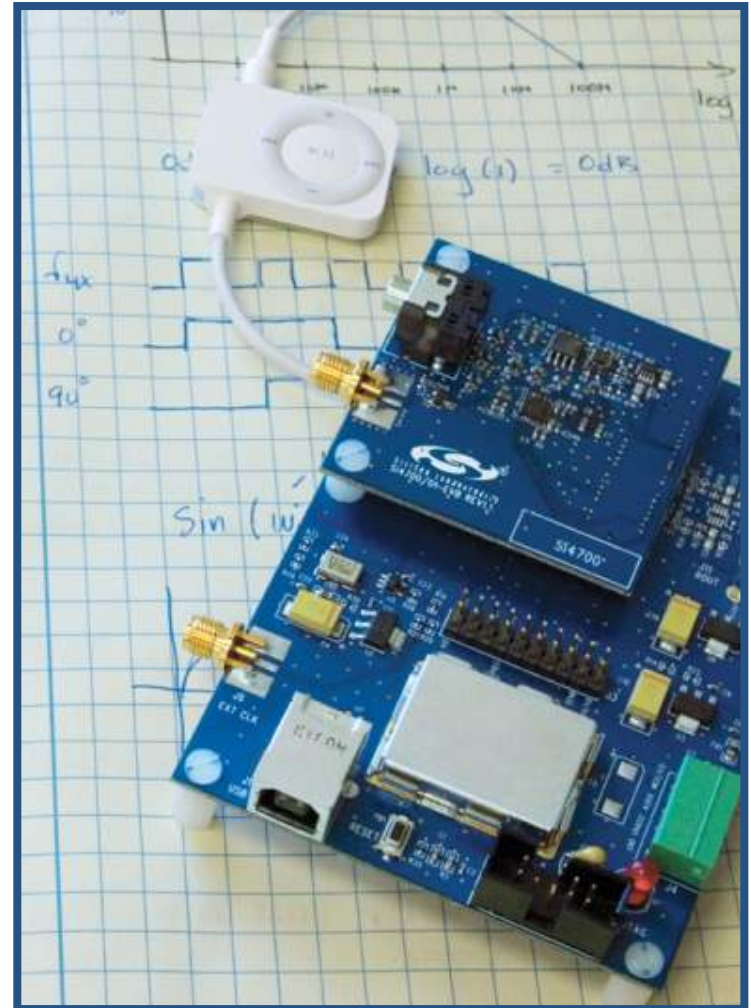
Applications:

Handsets
Portable Audio Devices
Digital Satellite TV
XM Satellite Radio



Broadcast Core Competency

- ◆ Pioneered the development of high-performance RF in CMOS
- ◆ Use CMOS to enable architecture development that combines digital signal processing and RF in a single chip
- ◆ Results in unmatched integration, performance and lowest total cost of ownership



Introducing the Si473x Multiband Receivers

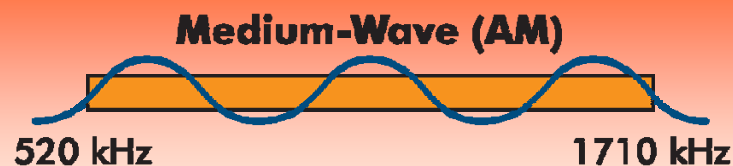
- ◆ Patented, proven digital architecture simplifies radio design
- ◆ Improved audio experience, features and adjustability
- ◆ Ultra-small, enabling technology for AM in portable devices
- ◆ World's first single chip AM/FM/SW/LW and AM/FM/WB solutions



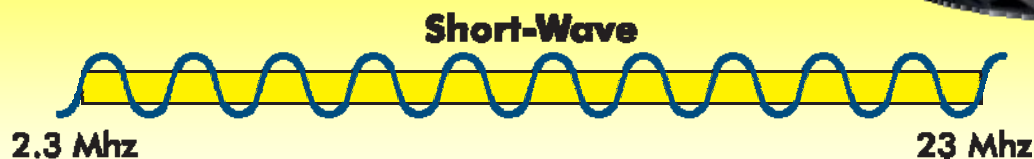
Si473x AM/FM/SW/LW Receiver Bands



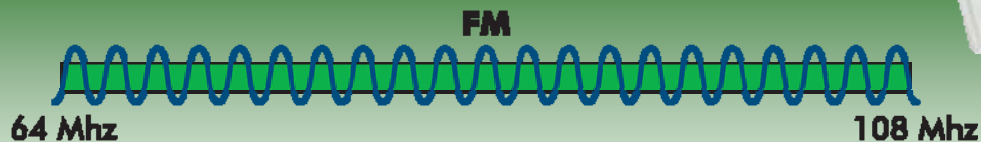
- ◆ LW receiver (153–279 kHz)
 - Popular in Europe and North Africa for news & sports



- ◆ AM receiver (520–1710 kHz)
 - News, talk, sports, foreign programming



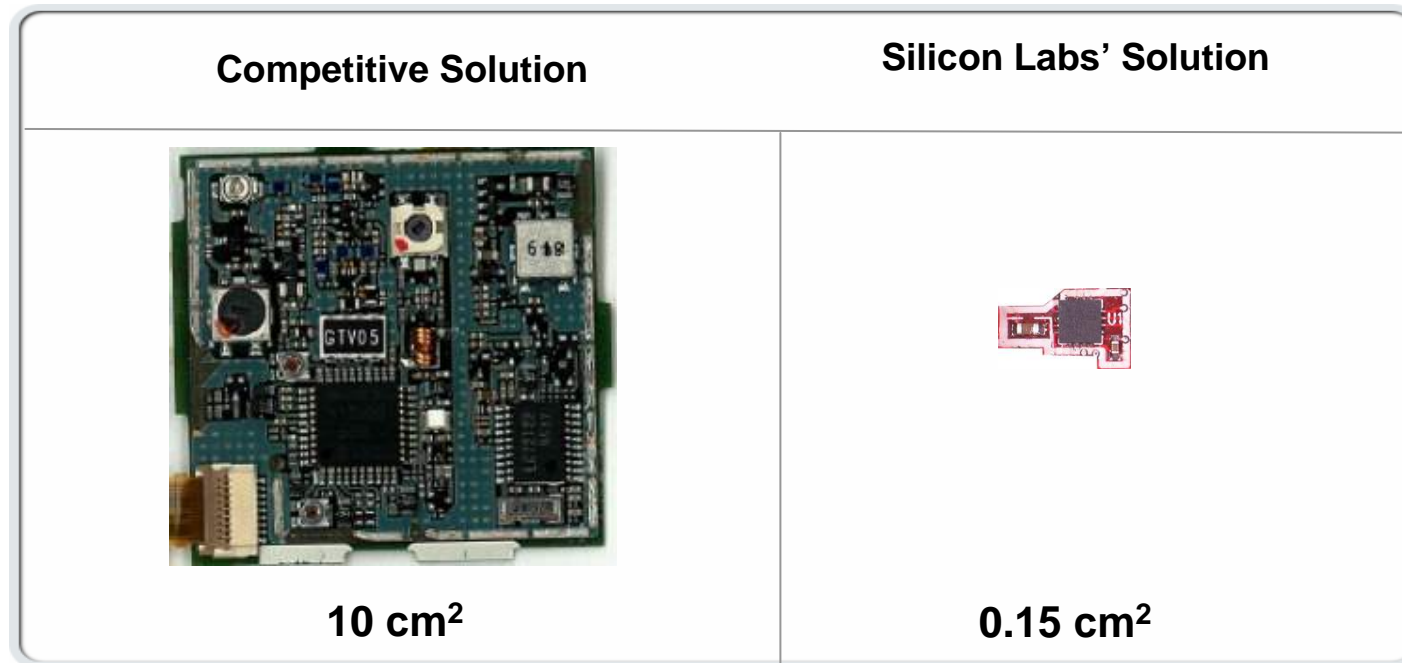
- ◆ SW receiver (2.3–23 MHz)
 - Popular in China, India, Brazil
 - Worldwide coverage



- ◆ Extended FM receiver (64–76 MHz)
 - College radio, emergency, TV
- ◆ FM receiver (76–108 MHz)
 - Popular worldwide



First Fully Integrated AM/FM Receiver

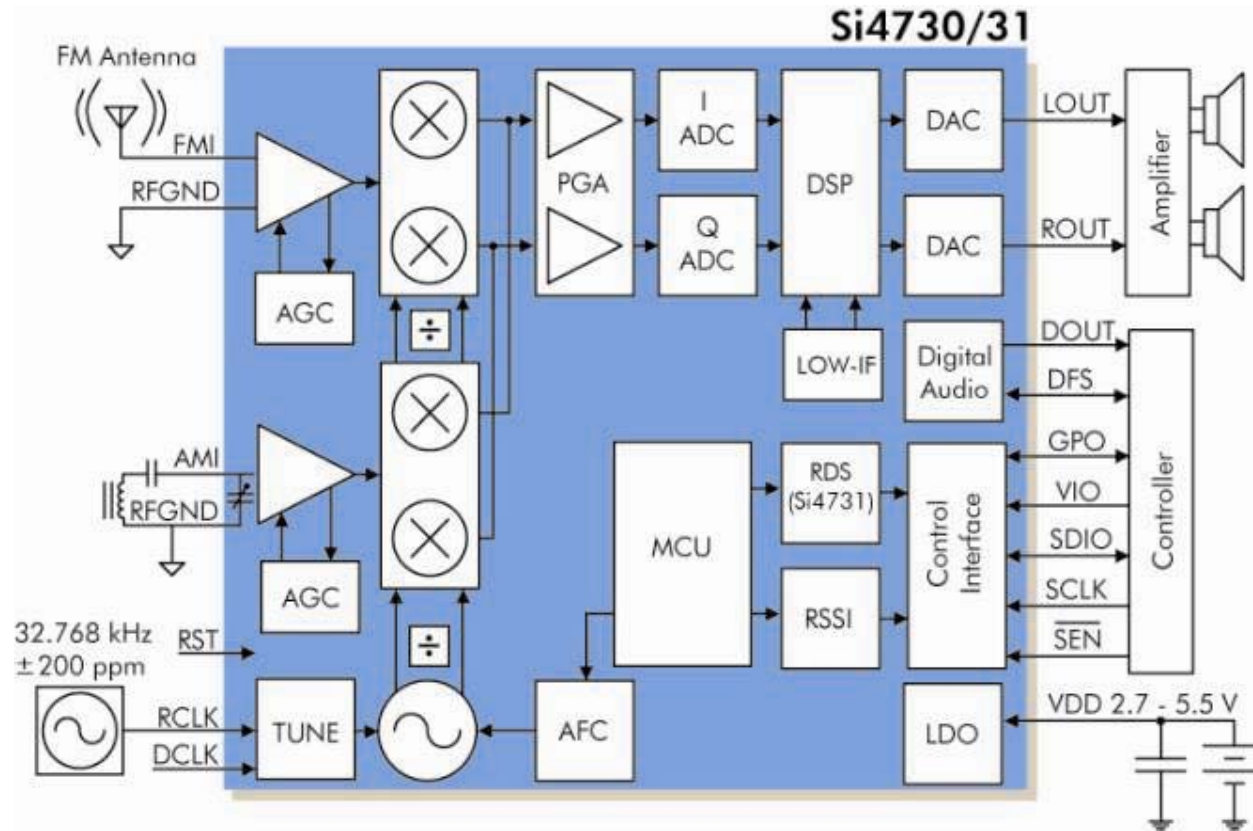


2x scale

- ◆ Simplifies customer design and development
 - Decreases bill-of-material (BOM) and manufacturing costs
 - Reduces time-to-market
 - Offers easy-to-use software interface



Si473x—Digital Architecture Advantages



- ◆ Only fully integrated AM/FM radio receiver
- ◆ Disruptive technology with only two external components
- ◆ Enables integration of AM/FM radio into portable devices

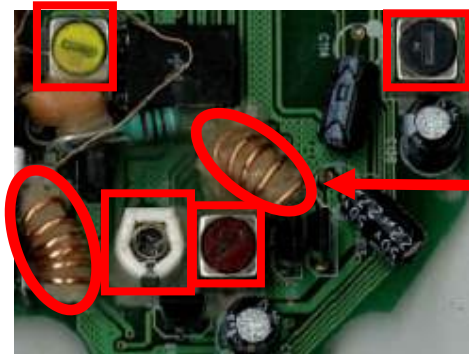
Si473x—No Factory Tuning Required

Traditional Solutions

- ◆ Require hand tuned components to adjust for antenna variance
- ◆ Increases production time and manufacturing cost
- ◆ Higher fallout rate and variability

Silicon Laboratories Solution

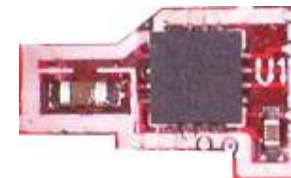
- ◆ Eliminates factory alignment
- ◆ Low BOM count with standard production flow
- ◆ Highly accurate digital tuning



Traditional Solution

*Manually tuned
Inductor*

*Hand spread
and waxed*



*No factory
alignment*

Silicon Labs
Si4730



Si473x—Flexible Antenna Support

- ◆ The Si473x accepts a wide range of antennas
- ◆ High performance enables new miniature AM ferrite antennas for portable applications



FM headphone antenna



FM monopole antenna



FM stub antenna



AM loop antenna



Standard AM ferrite loop stick

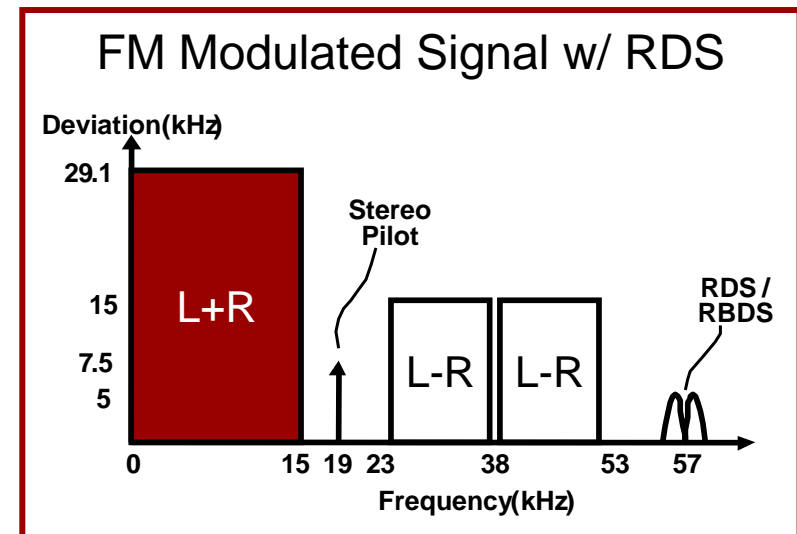
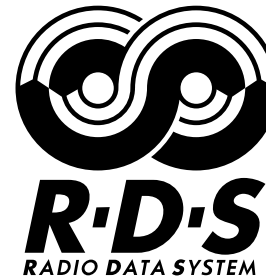


Miniature AM ferrite loop stick



Si4731—First AM/FM + RDS IC Solution

- ◆ Si473x is the only solution in the world to support AM, FM and RDS in a single IC
 - The European Radio Data System (RDS) and the U.S. Radio Broadcast Data System (RBDS) displays artist, song title, and other information
- ◆ RDS market adoption increasing
 - AM/FM with RDS equals MP3 experience
 - Standard in car radios
- ◆ Silicon Laboratories RDS devices shipping worldwide



Si473x—Summary

- ◆ The Si473x AM/FM radio receiver is one of Electronic Products' Products of the Year for 2007
- ◆ Patented, proven digital architecture simplifies radio design and improves user experience
- ◆ Enabling technology for AM in portable devices
- ◆ Same footprint supports AM/FM, AM/FM + RDS, AM/FM/SW/LW, and AM/FM/WB



Product Selector Guide

Part	RDS	RPS	FM	TX	AM	SW	WB	SAME	PCM
Si4702			✓						
Si4703	✓		✓						
Si4704			✓						
Si4705	✓		✓						✓
Si4706	✓+								
Si4707							✓	✓	✓
Si4710				✓					✓
Si4711	✓			✓					✓
Si4712		✓		✓					✓
Si4713	✓	✓		✓					✓
Si4720			✓	✓					
Si4721	✓		✓	✓					✓
Si4730			✓		✓				
Si4731	✓		✓		✓				✓
Si4734			✓		✓	✓			
Si4735	✓		✓		✓	✓			✓
Si4736			✓		✓		✓		
Si4737	✓		✓		✓		✓		✓
Si4738			✓				✓		
Si4739	✓		✓				✓		✓



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