Si47951-52 Data Short

High-Performance Automotive AM/FM Radio Receiver and HD Radio™/DAB/DAB+/DMB/DRM Tuner

The Si47951/52 analog AM/FM receiver and digital radio tuner sets a new standard for automotive broadcast reception.

The Si47951/52 is the most integrated automotive tuner in the industry with the smallest external bill of materials. Si47951/52 based systems can scale from a low-cost single tuner AM/FM radio to the highest performance systems with multiple tuners and multiple antennas, enabling the radio suppliers to reuse their R&D across multiple product lines, all with a common software API. The Si47951/52 A-grade parts meet rigorous automotive quality standards.

Applications

- OEM automotive infotainment systems
- Aftermarket car radio systems

KEY FEATURES

- Worldwide FM band support (64–108 MHz)
- Worldwide AM band support (520–1710 kHz)
- LW band support (144–288 kHz)
- DAB/DAB+/DMB support (Si47952 only) (170–240 MHz)
- SW band support (2.3–30 MHz)
- NOAA Weather band support
- On-chip soft-decision RDS/RDBS demodulator/decoder
- Digital I/Q interface to HD Radio Processor
- Fast FM HD Radio band scan
- DRM30/DRM+ (Si47952 only)
- DRM detect
- Digital I/Q interface to DRM processor
- Fully integrated AGC
- Digital I/Q interface to DAB/DAB+/DMB processor
- Integrated active Band III buffer
- Fast DAB/DAB+/DMB band scan
- Fully integrated AGC for Band III
- Two analog audio outputs
- Two digital audio ports (I²S)
- Integrated clock oscillator
- 1.8 V or 3.3 V digital IO power supplies
- 3.3 V analog power supply and 1.8 V digital power supply
- QFN 56-pin, 8x8x0.85 mm
- Pb-free/RoHS compliant
- AEC-Q100 qualified (A-grade parts)
1. Pin Descriptions

Figure 1.1. Si47951-52 Pinout Diagram
2. Package Outline

Figure 2.2. 56-Pin QFN
Table 2.1. Package Dimensions

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<tr>
<th>Dimensions</th>
<th>Min</th>
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<th>Max</th>
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<td>0.05</td>
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Note:
1. All dimensions shown are in millimeters (mm) unless otherwise noted.
3. Recommended card reflow profile is per the JEDEC/IPC J-STD-020 specification for Small Body Components.
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