

# Si47942 Data Short

# High-Performance Automotive DAB/DAB+/DMB Tuner

The Si47942 integrates two global radio receivers. The digital radio tuners set a new standard for automotive broadcast reception.

The Si47942 is the most integrated automotive tuner in the industry with the smallest external bill of materials. Si47942 based systems can scale from a low-cost dual tuner 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 Si47942 A-grade parts meet rigorous automotive quality standards.

#### Applications

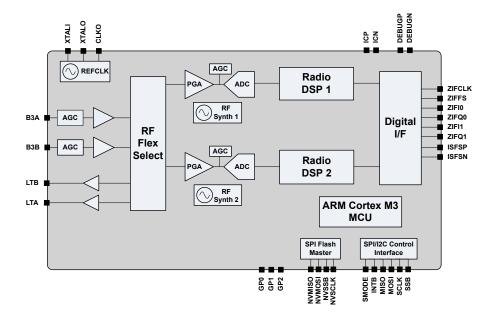
- · Automotive OEM infotainment systems
- · Aftermarket car radio systems

#### KEY FEATURES

- Frequency synthesizers with fully integrated PLL-VCOs
- · Integrated clock oscillator
- 1.8 V or 3.3 V digital I/O power supplies
- 3.3 V analog power supply and 1.8 V digital power supply
- Dual DAB/DAB+/DMB support (168– 240MHz)
- Dual DAB/DAB+/DMB
  - Digital I/Q interface to DAB/DAB+/DMB processor
  - DAB/DAB+/DMB MRC with two tuners
  - Integrated active Band III buffers for background/data tuners
  - Fast DAB/DAB+/DMB band scan
- · Fully integrated AGCs for Band III inputs

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- QFN 56-pin, 8 x 8 x 0.85 mm
- Pb-free/RoHS compliant
- · AEC-Q100 qualified (A-grade devices)



### 1. Pin Descriptions

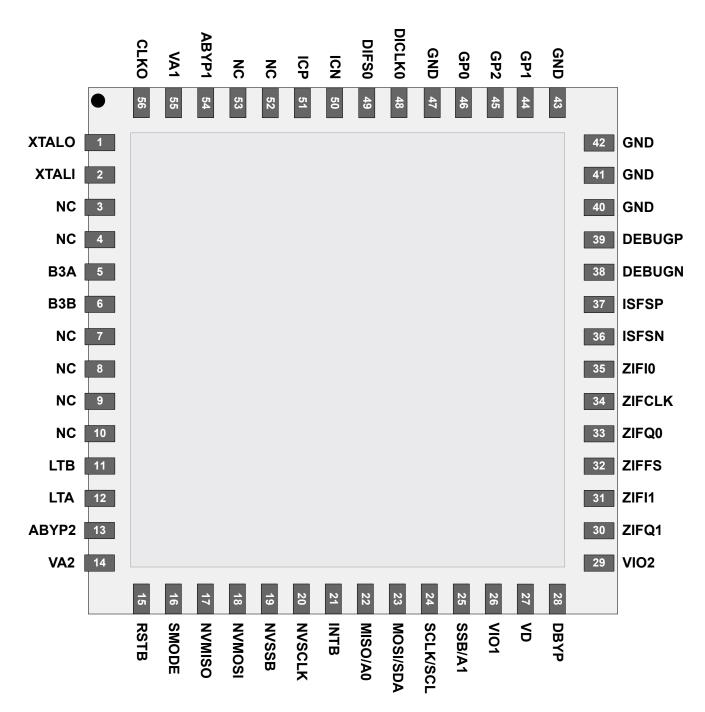


Figure 1.1. Si47942 Pinout Diagram

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## 2. Package Outline

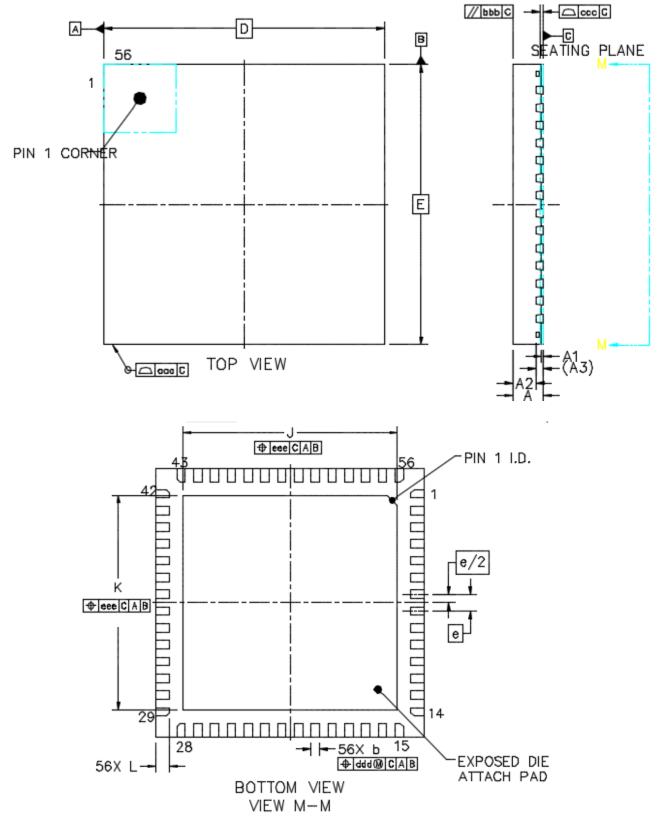


Figure 2.2. 56-Pin QFN

#### Table 2.1. Package Dimensions

Dimensions	Min	Nom	Мах
A	0.80	0.85	0.90
A1	0.00	0.035	0.05
b	0.20	0.25	0.30
A3	0.203 REF		
D	8.00 BSC		
e	0.5 BSC		
E	8.00 BSC.		
D2	6.30	6.40	6.50
E2	6.30	6.40	6.50
L	0.35	0.40	0.45
К	0.20	_	—
ааа	0.10		
bbb	0.10		
CCC	0.08		
ddd	0.10		
eee	0.10		

### Note:

1. All dimensions shown are in millimeters (mm) unless otherwise noted.

2. Dimensioning and Tolerancing per ANSI Y14.5M-1994.

3. Recommended card reflow profile is per the JEDEC/IPC J-STD-020 specification for Small Body Components.









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