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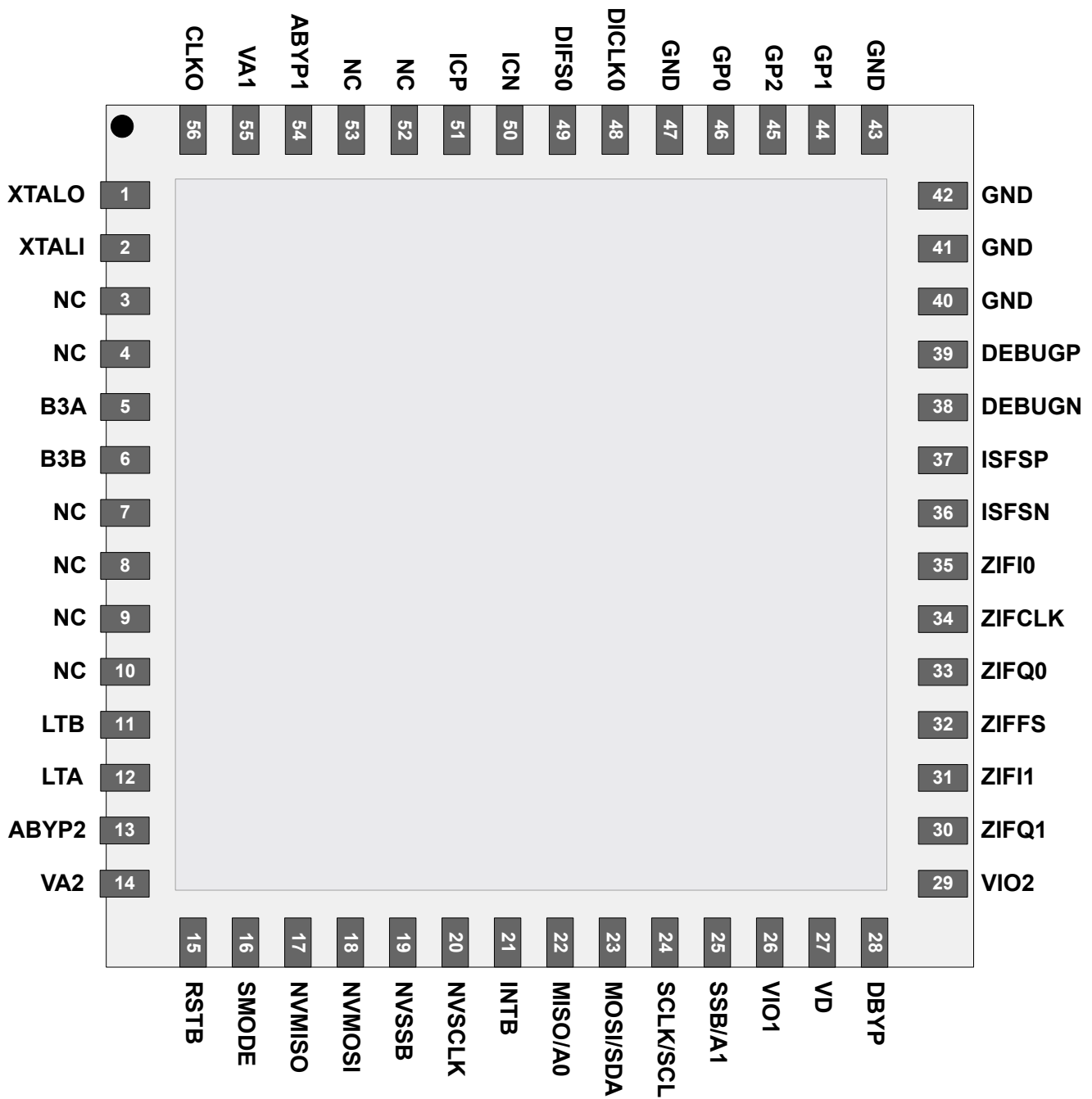
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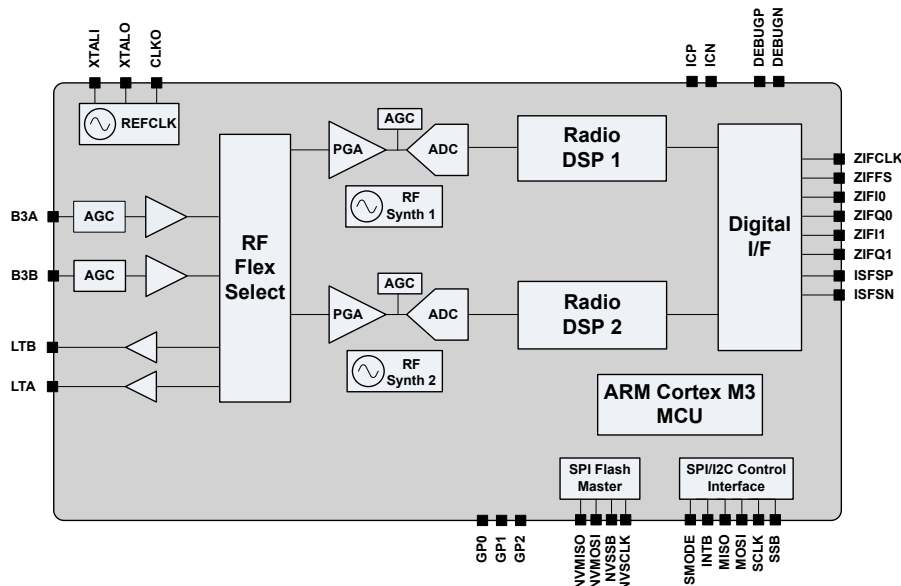
1. Pin Descriptions

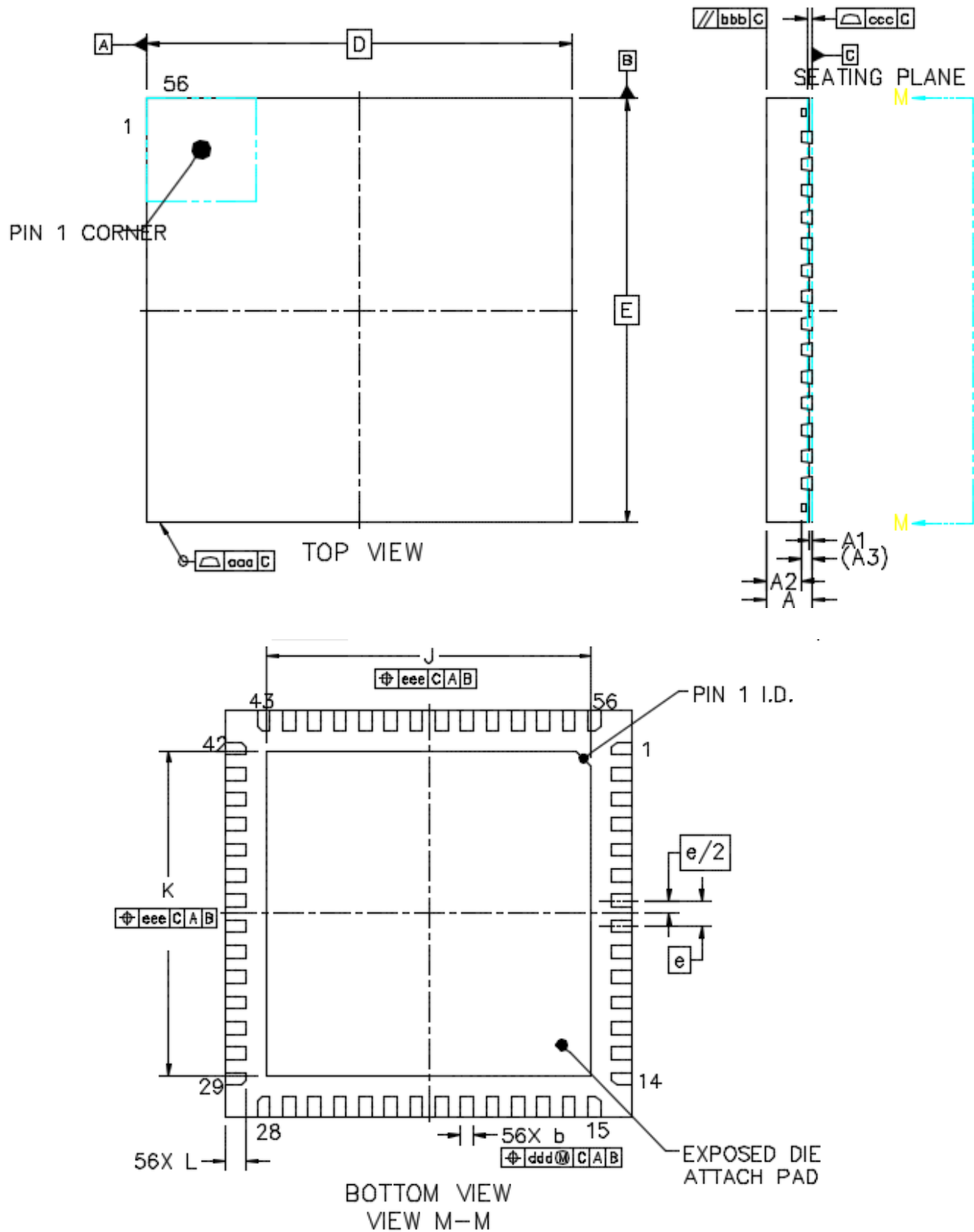**Figure 1.1. Si47942 Pinout Diagram**

2. Package Outline

Figure 2.2. 56-Pin QFN

Table 2.1. Package Dimensions

Dimensions	Min	Nom	Max
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
K	0.20	—	—
aaa	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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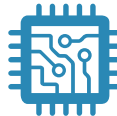
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