Si47961-62 Data Short

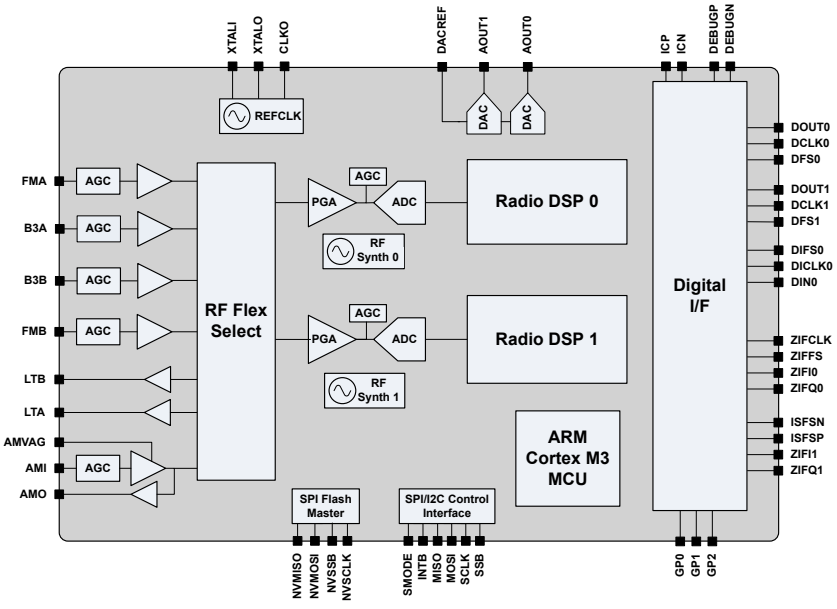
High-Performance Automotive Dual AM/FM Radio Receiver and HD Radio™/DAB/DAB+/DMB/DRM Tuner

The Si47961/62 integrates two global radio receivers. The analog AM/FM receivers and digital radio tuners set a new standard for automotive broadcast reception.

The Si47961/62 is the most integrated automotive tuner in the industry with the smallest external bill of materials. Si47961/62 based systems can scale from a low-cost dual 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 Si47961/62 A-grade parts meet rigorous automotive quality standards.

Applications

- OEM automotive infotainment systems
- Aftermarket car radio systems



KEY FEATURES

- Dual worldwide FM band support (64–108 MHz)
- Dual worldwide AM band support (520–1710 kHz)
- Dual LW band support (144–288 kHz)
- Dual SW band support (2.3–30 MHz)
- Dual DAB/DAB+/DMB support (Si47962 only) (168–240 MHz)
- NOAA Weather Band support
- On-chip RDS/RDBS
- AM/FM
  - Comprehensive AM/FM signal processing firmware
  - Integrated active AM/FM buffers for background/data tuners
  - Analog FM phase diversity with two tuners
- HD Radio
  - Digital I/Q interface to HD Radio Processor
  - HD Radio MRC with two tuners
- DRM30/DRM+ (Si47962 only)
  - Digital I/Q interface to DRM processor
  - Fully integrated AGC
  - DRM detect
- Dual DAB/DAB+/DMB (Si47962 only)
  - 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
- Audio
  - Two analog audio outputs
  - Three digital audio ports (I^2S)
- 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 devices)

1. Pin Descriptions

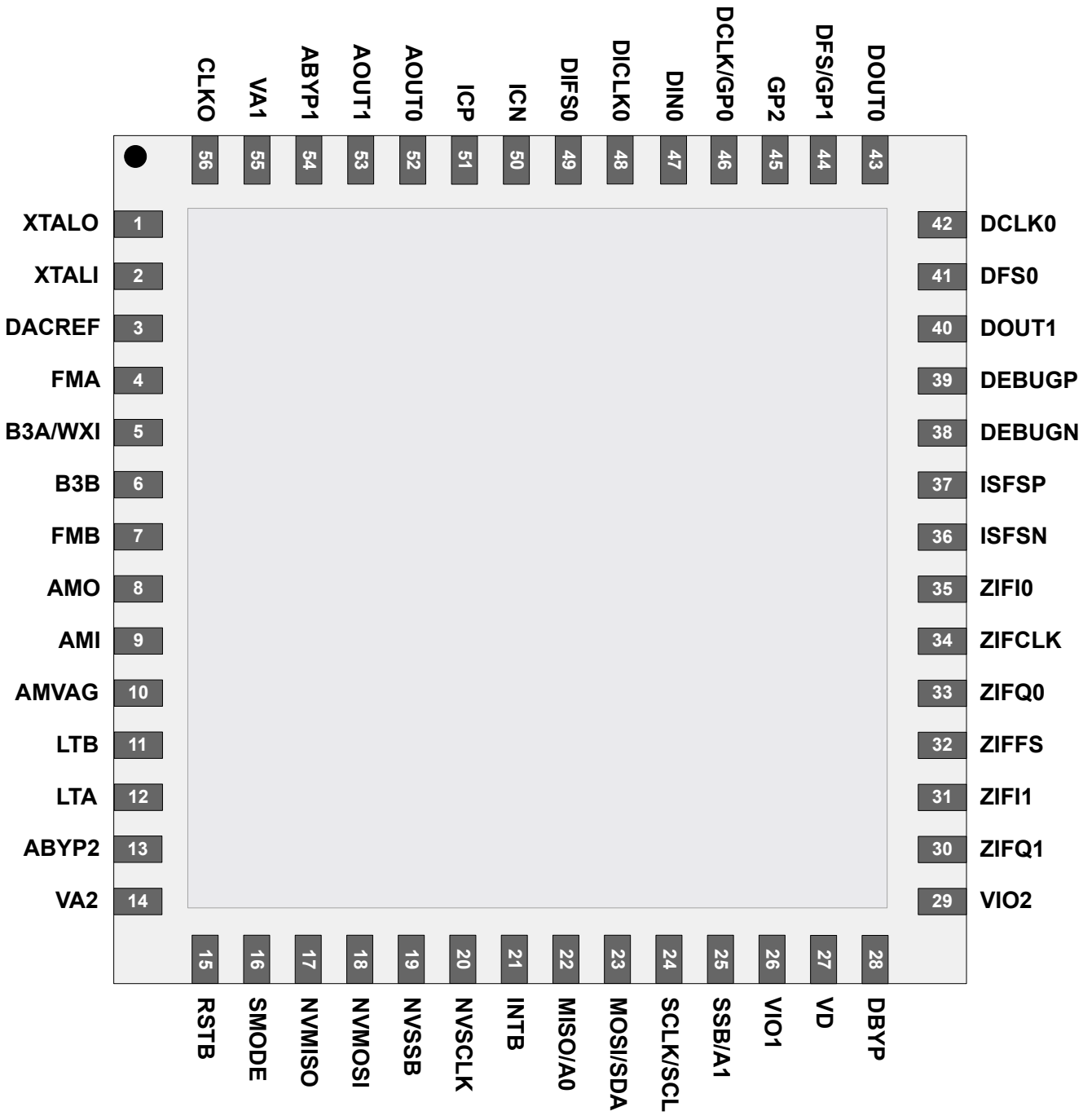


Figure 1.1. Si47961-62 Pinout Diagram

2. Package Outline

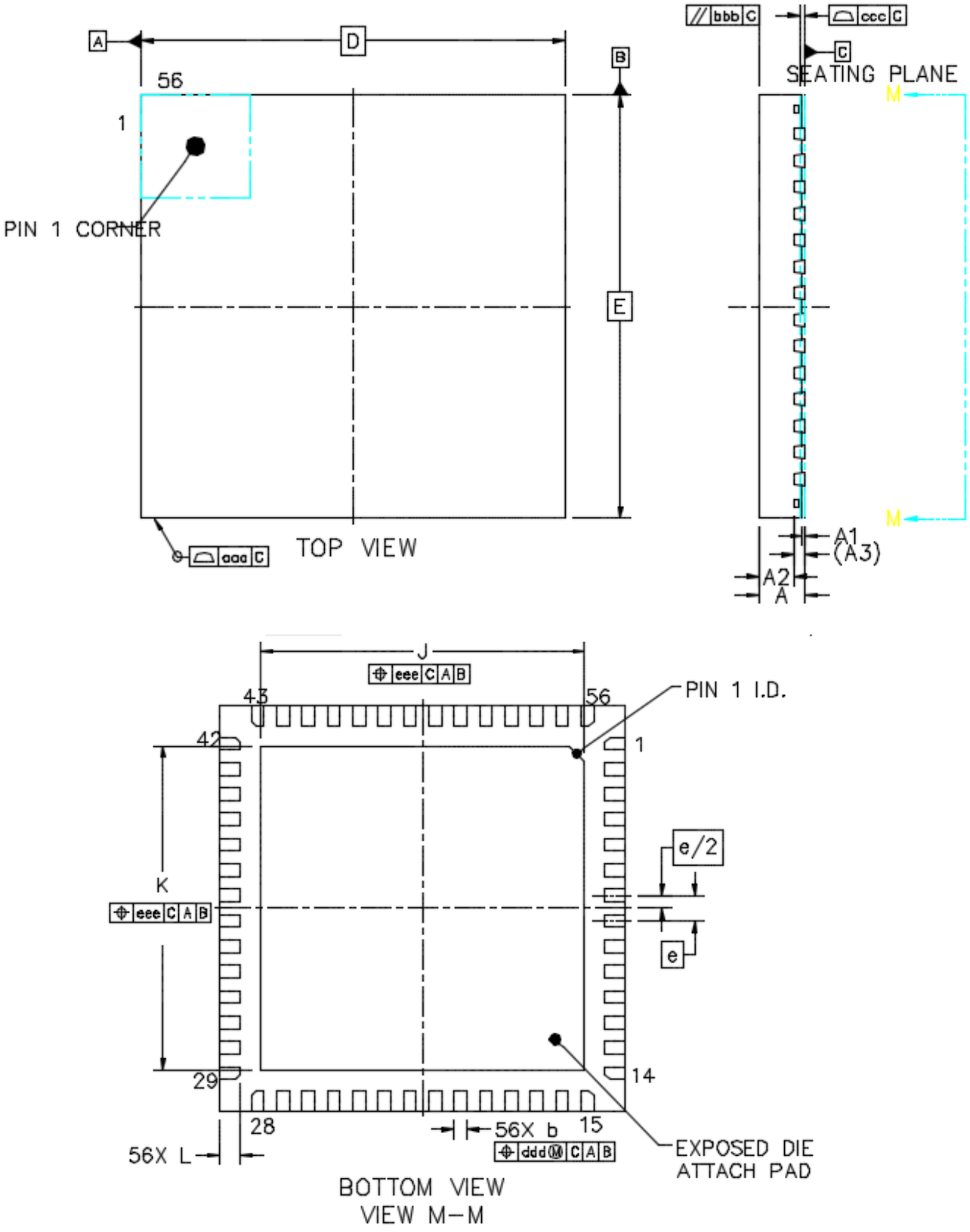


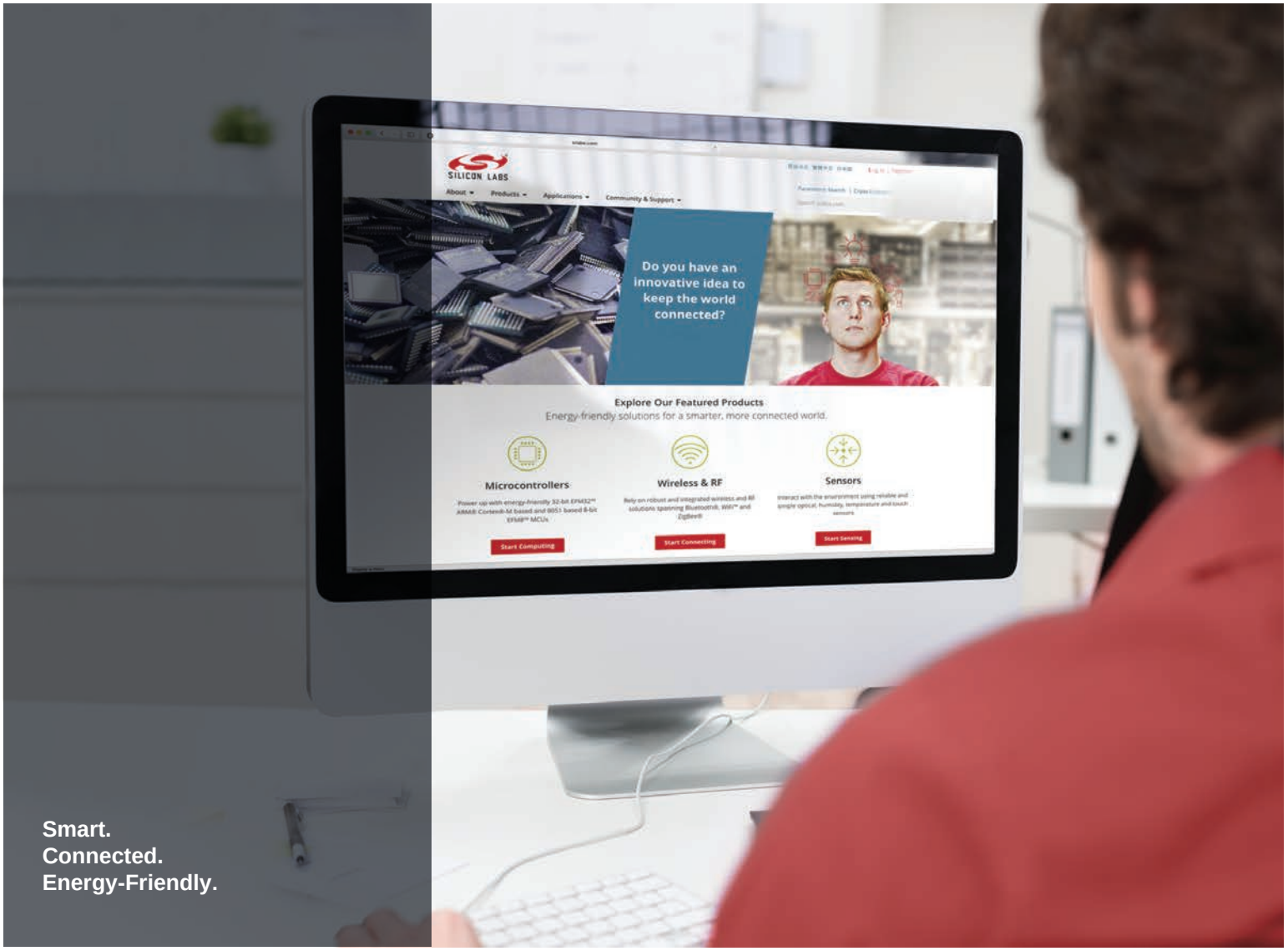
Figure 2.2. 56-Pin QFN

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.



Products
www.silabs.com/products

Quality
www.silabs.com/quality

Support and Community
community.silabs.com

SILICON LABS

Silicon Laboratories Inc.
400 West Cesar Chavez
Austin, TX 78701
USA

http://www.silabs.com