Si47907 Data Short

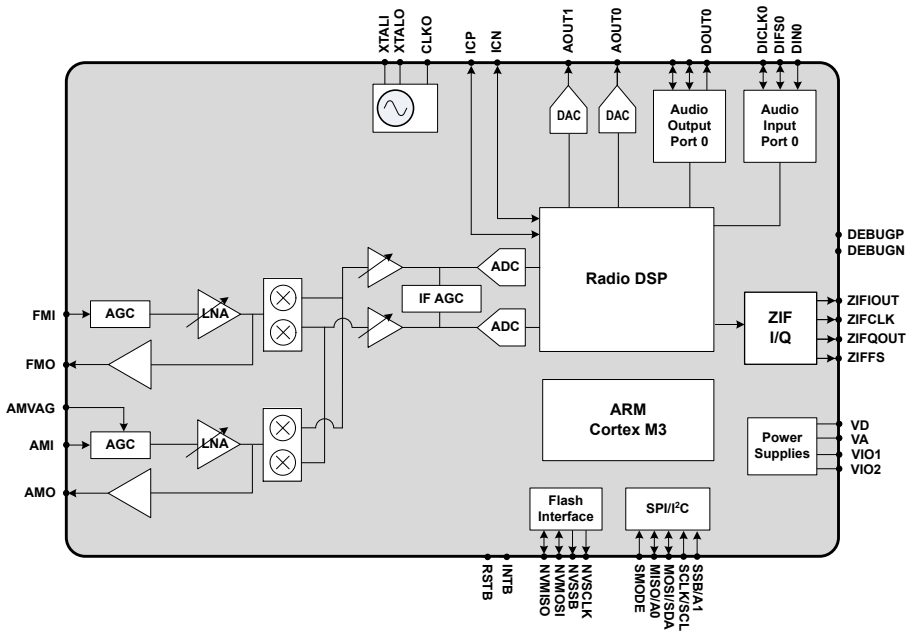
High-Performance Automotive AM/FM Radio Receiver and DRM Tuner

The Si47907 analog AM/FM receiver and digital radio tuner sets a new standard for automotive broadcast reception.

The Si47907 is the most integrated automotive hybrid SDR DRM tuner in the industry with the smallest external bill of materials. Si47907-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 radio suppliers to reuse their R&D across multiple product lines, all with a common software API. The Si47907 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)
- SW band support (2.3–30 MHz)
- On-chip soft-decision RDS/RDBS demodulator/decoder
- AM/FM:
  - Comprehensive AM/FM signal processing firmware
  - Integrated active AM/FM buffers
  - Analog FM phase diversity
  - Fully integrated AGC
- DRM30/DRM+:
  - Digital I/Q interface to DRM processor
  - Fully integrated AGC
  - DRM detect
- Two analog audio outputs
- Two digital audio ports (I^2S)
- 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 48-pin, 7 x 7 x 0.85 mm
- Pb-free/RoHS compliant
- AEC-Q100 qualified (A-grade parts)

1. Pin Descriptions

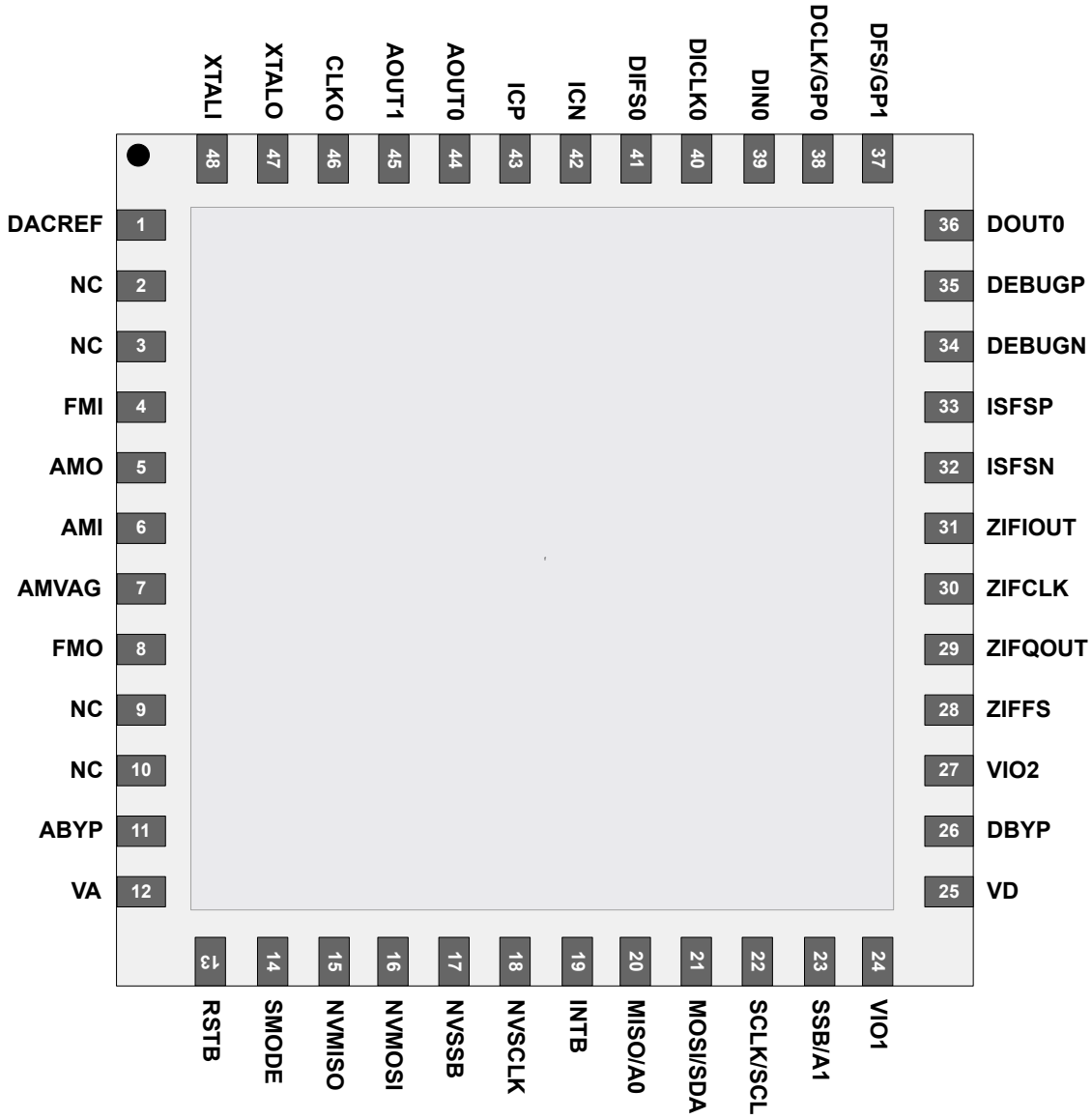


Figure 1.1. Si47907 Pinout Diagram

2. Package Outline

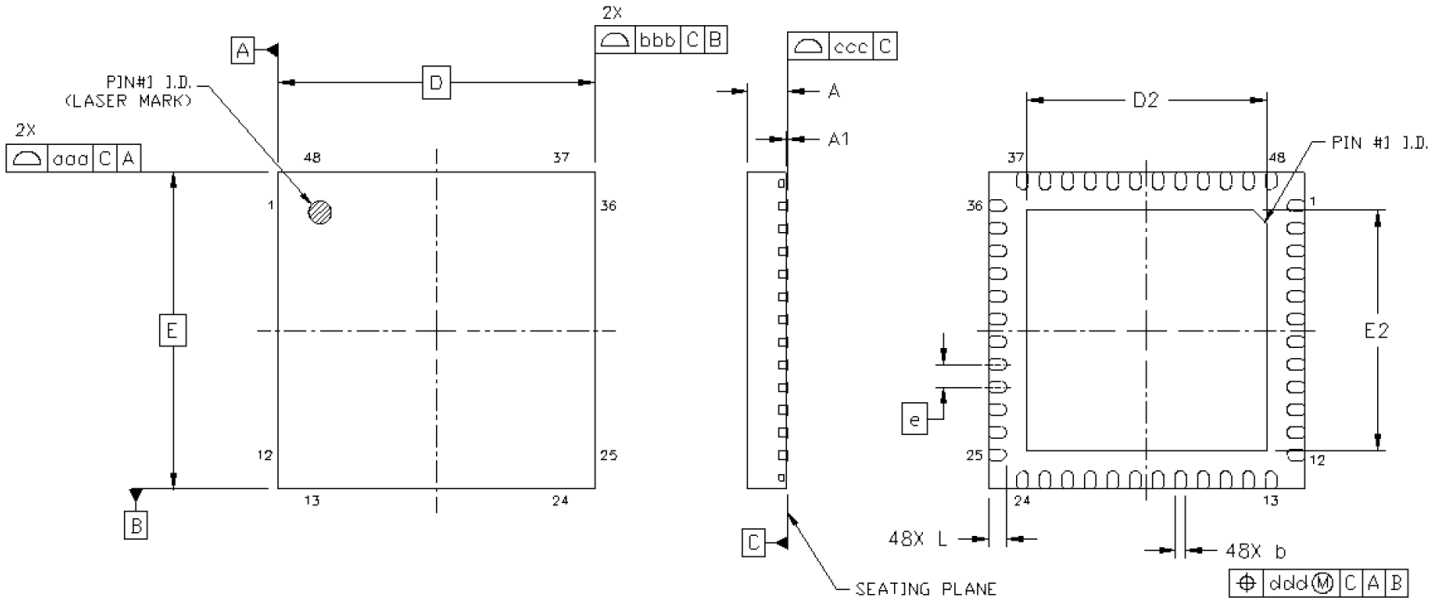


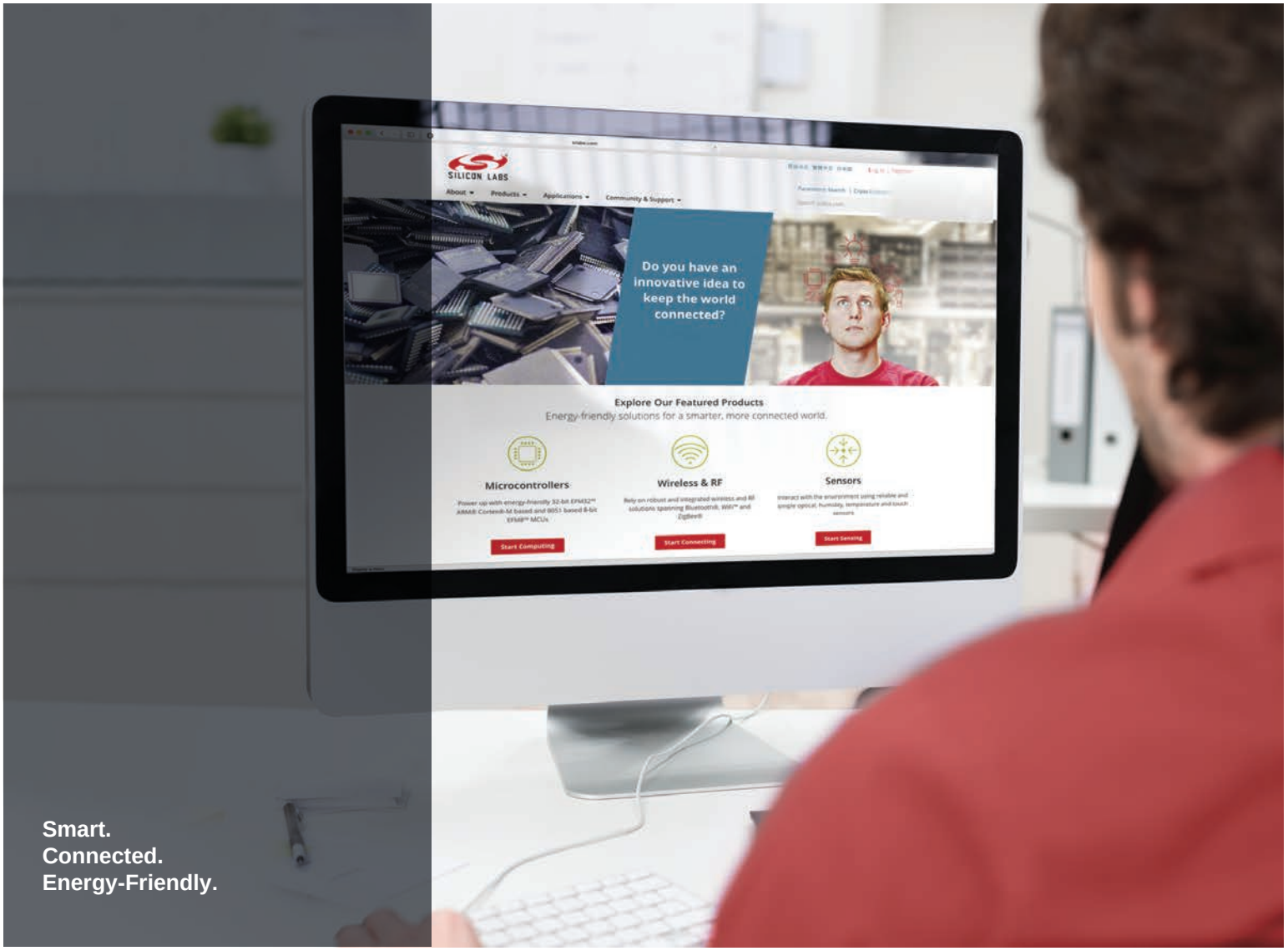
Figure 2.1. 48-Pin QFN

Table 2.1. Package Dimensions

Dimensions	Min	Nom	Max
A	0.80	0.85	0.90
A1	0.00	0.03	0.05
b	0.20	0.25	0.30
D		7.00 BSC	
D2	5.20	5.30	5.40
e		0.50 BSC	
E		7.00 BSC.	
E2	5.20	5.30	5.40
L	0.35	0.40	0.45
aaa	—	—	0.10
bbb	—	—	0.10
ccc	—	—	0.08
ddd	—	—	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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