Bluetooth Low Energy SoC

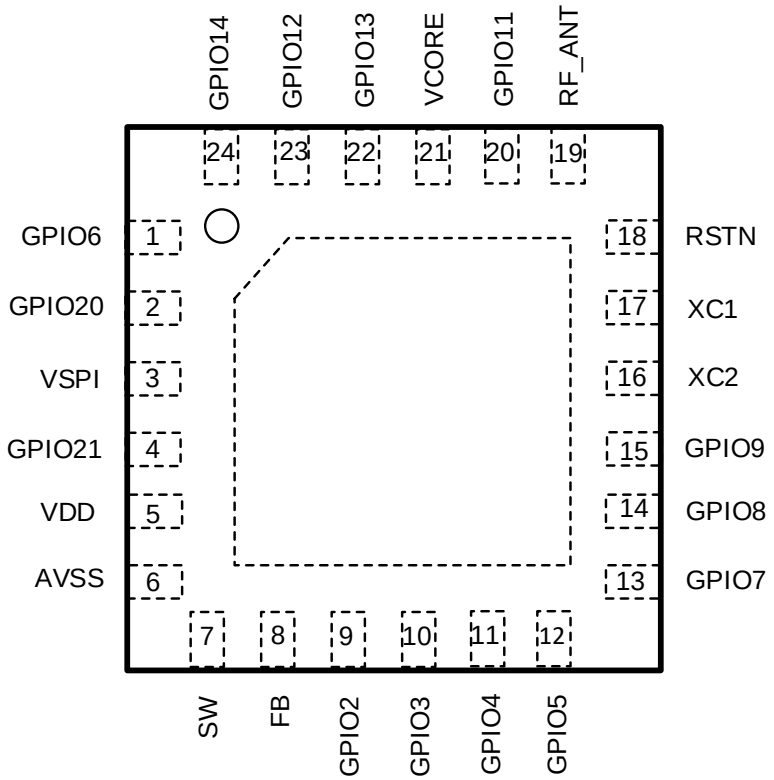
DESCRIPTIONS

The SUM7057 is a System on Chip (SoC) fully compliant with BLE 5.0 Spec. It integrates a low power, high performance 2.4GHz transceiver, a 32-bit RISC MCU up to 64 MHz, and rich interface peripherals. The SOC's memory system includes 128 KB ROM, 48 KB retention SRAM, 16 KB Cache SRAM, and up to 4 Mb flash. To help customers to reduce BOM cost, The SUM7057 integrates Balun, DCDC, 32 KHz RC oscillator and charger. Under certain circumstances, The SUM7057 can work with one external crystal only. The SUM7057 offers abundant SDK with the function of over-the-air (OTA) firmware updating.

ORDER INFORMATION

Model	Package	Ordering Number	Packing Option
SUM7057	QFN4 × 4-24	SUM7057F512QNB24	Tape and Reel

PIN CONFIGURATION (Top View)

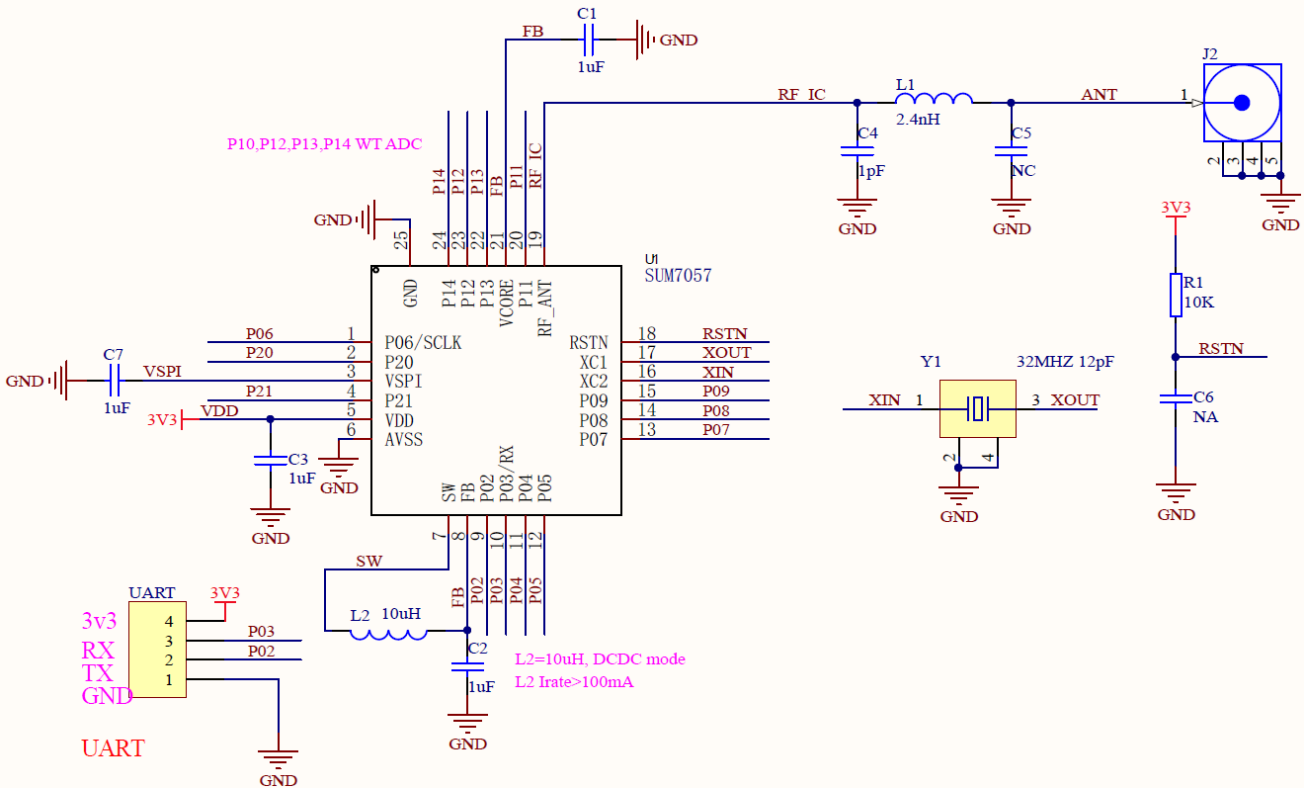


QFN4 × 4-24

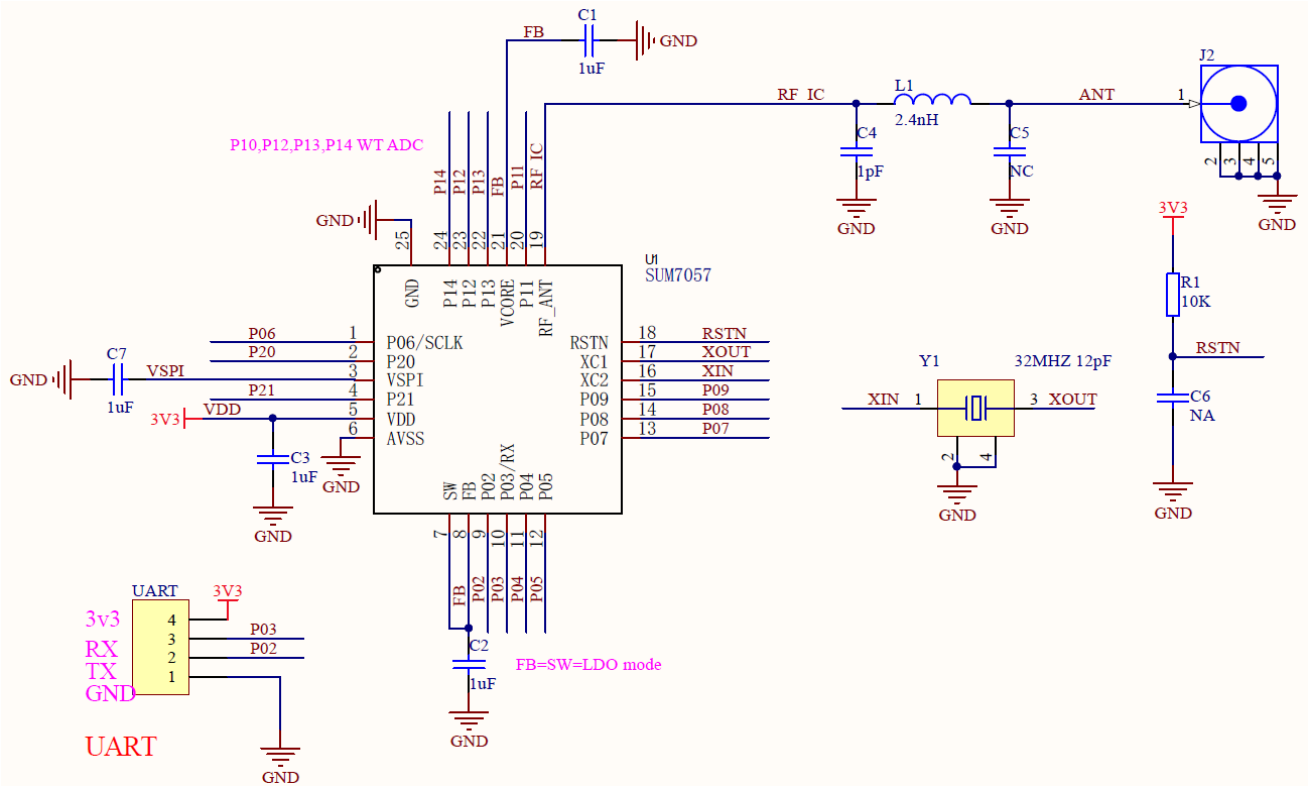
PIN FUNCTION

Pin Number	Name	Description
1	GPIO6	GPIO
2	GPIO20	GPIO
3	VSPI	I/O supply for flash
4	GPIO21	GPIO
5	VDD	VDD supply, 1.7V ~ 3.6 V
6	AVSS	GND
7	SW	No Connection
8	FB	VDD feedback for BUCK
9	GPIO2	GPIO
10	GPIO3	GPIO
11	GPIO4	GPIO
12	GPIO5	GPIO
13	GPIO7	GPIO
14	GPIO8	GPIO
15	GPIO9	GPIO
16	XC2	Crystal oscillator pin.
17	XC1	Crystal oscillator pin.
18	RSTN	Global chip enable/resetn, low level reset
19	RF_ANT	RF In/Out
20	GPIO11	GPIO
21	VCORE	Core supply
22	GPIO13	GPIO
23	GPIO12	GPIO
24	GPIO14	GPIO

APPLICATION CIRCUITS 1

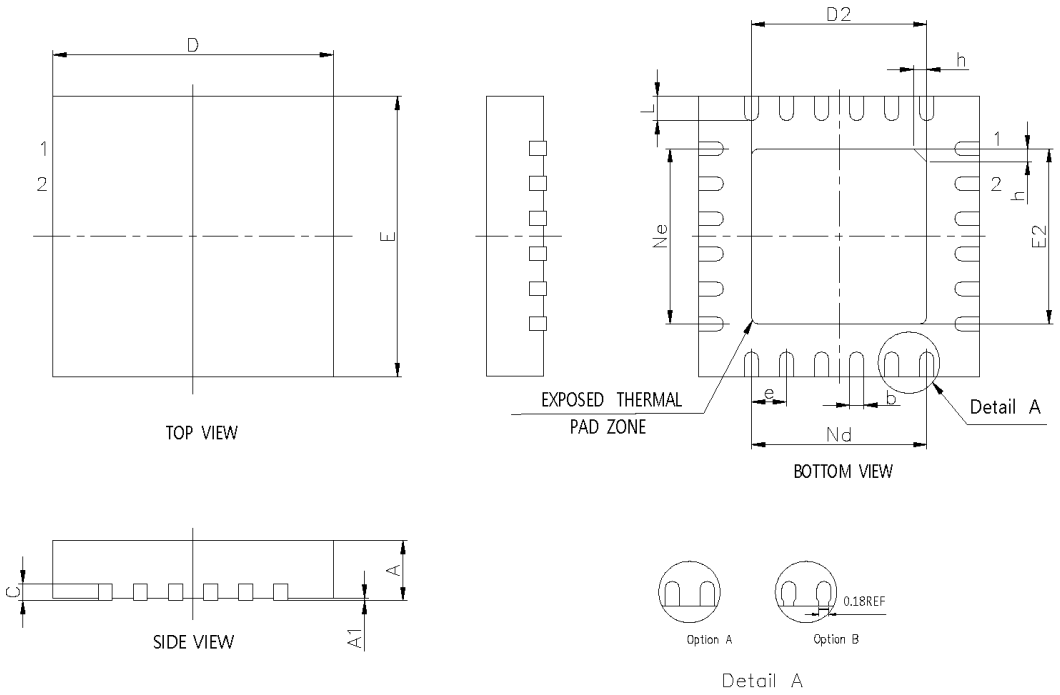


APPLICATION CIRCUITS 2



PACKAGE DIMENSION

QFN4 x 4-24



Symbol	Millimeter		
	Min	Nom	Max
A	0.70	0.75	0.80
A1	-	0.02	0.05
b	0.18	0.25	0.30
c	0.18	0.20	0.25
D	3.90	4.00	4.10
D2	2.40	2.50	2.60
e	0.50 BSC		
Nd	2.50 BSC		
Ne	2.50 BSC		
E	3.90	4.00	4.10
E2	2.40	2.50	2.60
L	0.35	0.40	0.45
h	0.30	0.35	0.40