

## Bluetooth Low Energy SoC

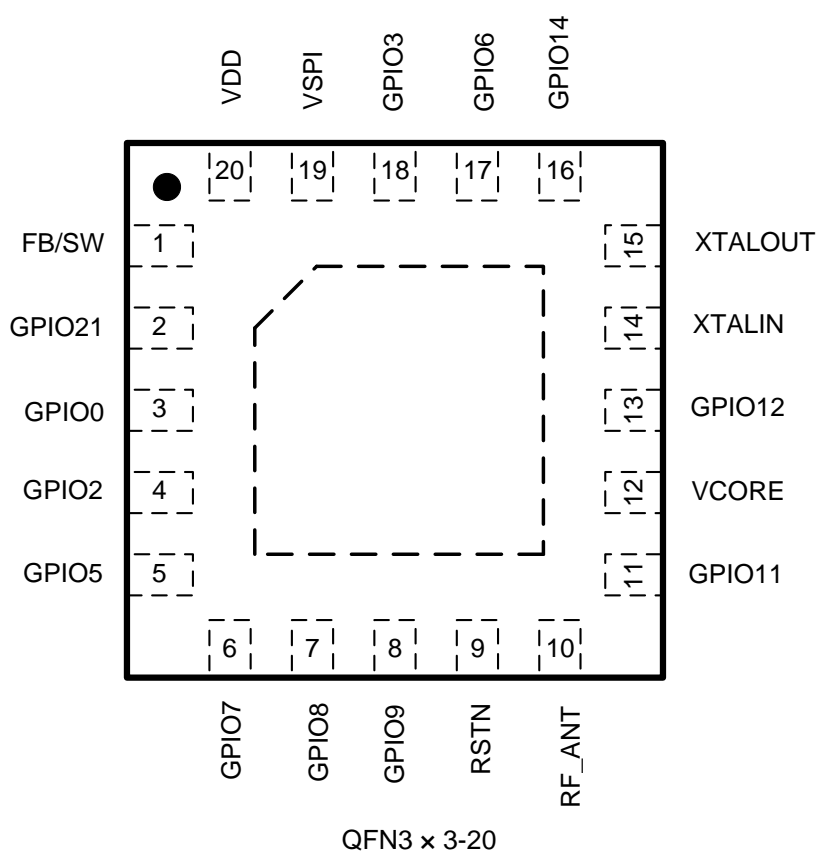
### DESCRIPTIONS

The SUM7054 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 SUM7054 integrates Balun, DCDC, 32 KHz RC oscillator and charger. Under certain circumstances, The SUM7054 can work with one external crystal only. The SUM7054 offers abundant SDK with the function of over-the-air (OTA) firmware updating.

### ORDER INFORMATION

Model	Package	Ordering Number	Flash Size	Packing Option
SUM7054	QFN3 × 3-20	SUM7054F128QNA20	128 KB	Tape and Reel
		SUM7054F512QNA20	512 KB	Tape and Reel

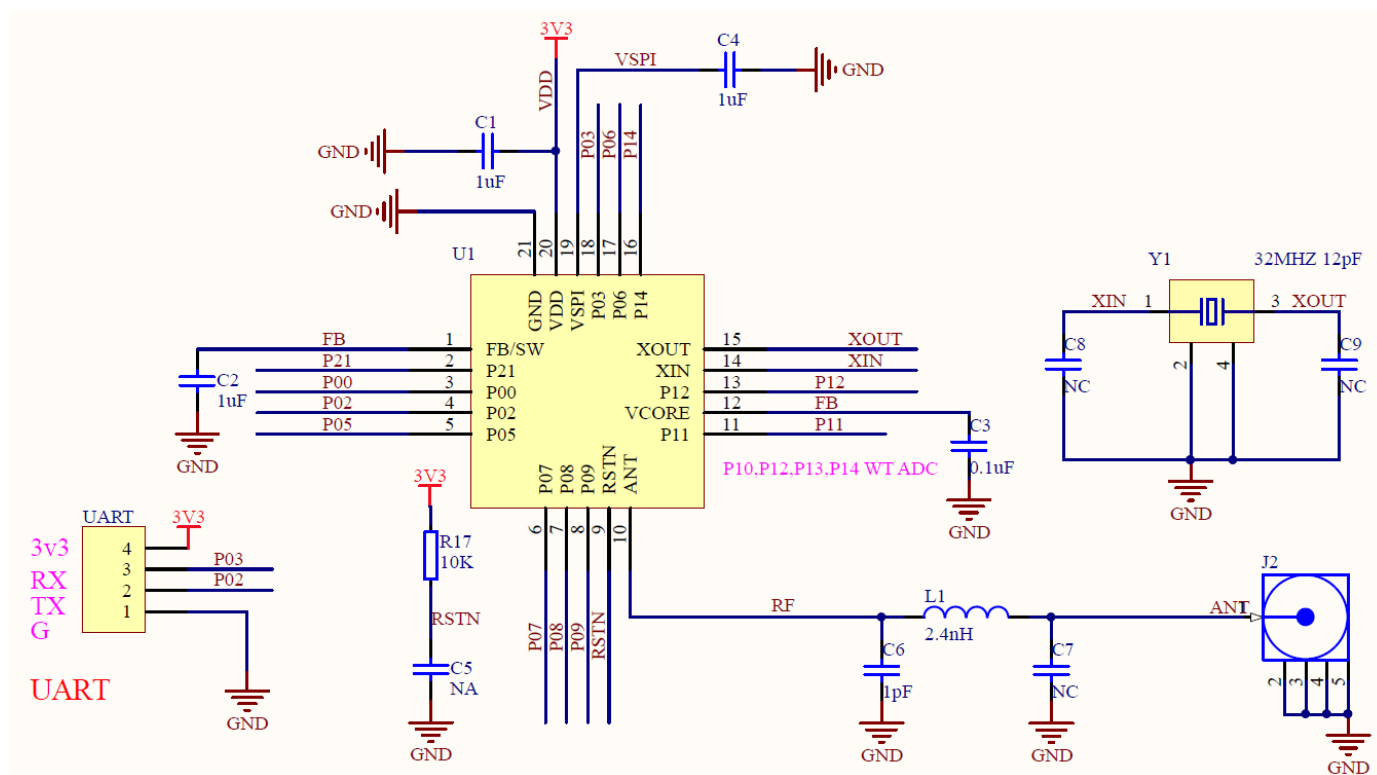
### PIN CONFIGURATION (Top View)



**PIN FUNCTION**

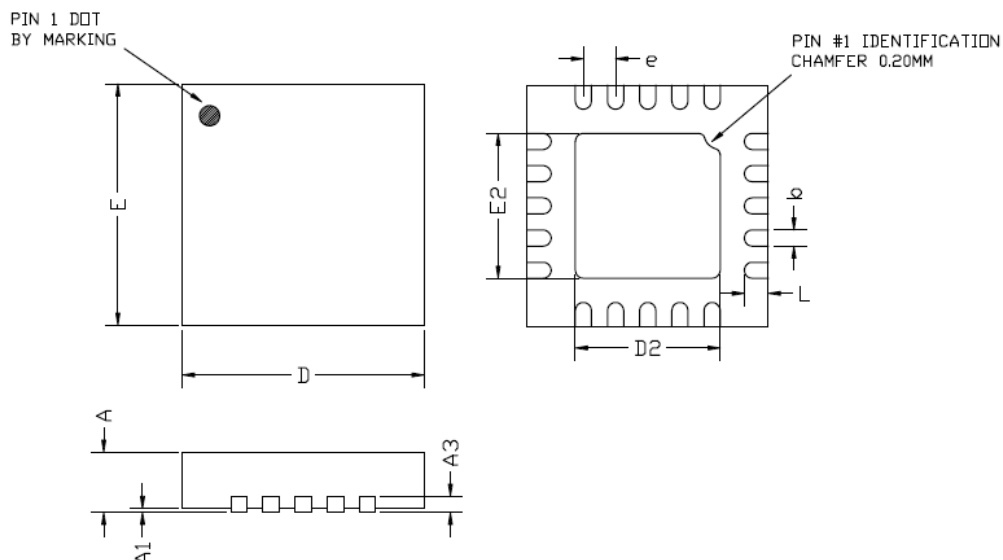
Pin Number	Name	Description
1	FB / SW	VDD feedback for BUCK / Used for external inductor (BUCK)
2	GPIO21	GPIO
3	GPIO0	GPIO
4	GPIO2	GPIO
5	GPIO5	GPIO
6	GPIO7	GPIO
7	GPIO8	GPIO
8	GPIO9	GPIO
9	RSTN	Global chip enable/resetn, low level reset
10	RF_ANT	ANT port
11	GPIO11	GPIO
12	VCORE	Core supply
13	GPIO12	GPIO
14	XTALIN	High frequency crystal input, 16M/24M/26M/32M
15	XTALOUT	High frequency crystal output, 16M/24M/26M/32M
16	GPIO14	GPIO
17	GPIO6	GPIO
18	GPIO3	GPIO
19	VSPI	I/O supply for external flash
20	VDD	VDD supply, 1.7 V~3.6 V

## APPLICATION CIRCUITS



## PACKAGE DIMENSION

### QFN3×3-20



Symbol	Dimensions In Millimeters		
	MIN	TYP	MAX
A	0.70	0.75	0.80
A1	0		0.05
A3	0.20 REF		
D	2.95	3.00	3.05
E	2.95	3.00	3.05
b	0.15	0.20	0.25
L	0.25	0.30	0.35
D2	1.65	1.80	1.90
E2	1.65	1.80	1.90
e	0.40 BSC		