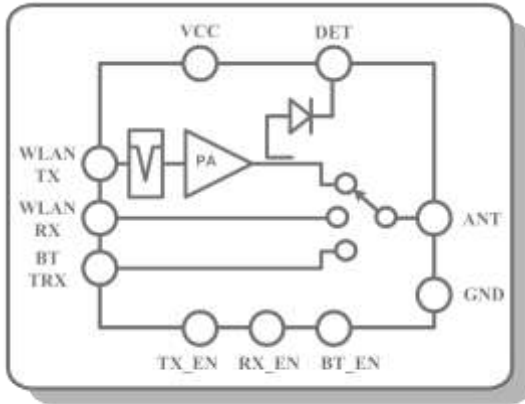


## 2.4GHZ WLAN/BLUETOOTH RFeIC with PA & SP3T



### Description

The RFX2420 is a fully integrated, single-chip, single-die RFeIC (RF Front-end Integrated Circuit) which incorporates all the RF functionality needed for dual-mode WLAN/Bluetooth operation.

The RFX2420 architecture integrates a high-efficiency high-linearity PA, a directional coupler & output power detector, impedance matching networks, harmonic filters, antenna switch, and a 2170MHz notch filter, into a single CMOS device.

This RFeIC is designed for use in combined 802.11b/g/n and Bluetooth applications operating in the 2.4GHz band, and supports simultaneous BT and WLAN receive.

Combining superior performance, ultra low power, small form factor, and low cost, RFX2420 is the perfect solution for mobile, handheld and portable devices with integrated WLAN and Bluetooth. RFX2420 is assembled in ultra-thin 2.5x2.5x0.45mm 16L QFN package, and requires minimal external components and PCB footprint.

### Applications

- ▶ Smartphones, Feature Phones and MIDs with WLAN/Bluetooth
- ▶ WLAN/Bluetooth Platforms Requiring Simultaneous Receive
- ▶ Laptop/Netbook/Smartbook with Embedded WiFi & Bluetooth
- ▶ Portable Platforms with Integrated 802.11 and Bluetooth

Parameters	Value	Conditions
<b>WLAN TX</b>		
Small-Signal Gain	29dB	TX_EN=TX_SW=High
WLAN 11g Output Power	+18dBm	EVM<3% (802.11g/n 54Mbps OFDM (VCC=3.3V)
WLAN 11b Output Power	+20dBm	802.11b CCK/1Mbps Mask Compliance(VCC=3.3V)
Current Consumption	130mA	Pout = +18dBm at ANT Port
Second/Third Harmonics	-40dBc/-40dBc	At Pout=+20dBm
Directional Coupler Coupling	20dB	Typical
Directional Coupler Directivity	20dB	Minimal
<b>WLAN RX and Bluetooth TRX</b>		
WLAN RX Insertion Loss	0.7dB	
Bluetooth TRX Insertion Loss	0.9dB	
Isolation	25dB Min	WLAN TX to RX
<b>CHIP</b>		
Operating Frequency	2.4-2.5GHz	
Supply VCC	2.3 – 4.2 VDC	
RF Port Impedance	50-Ohm	Single-ended
Control Signals	High Enable	<0.3V Low, >1.2V High
Package	16L-QFN	2.5mm x 2.5mm x 0.45mm

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This product brief is a general list of parameters to provide information on the capabilities of this device and is subject to change without notice.