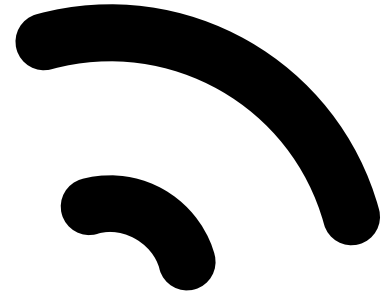


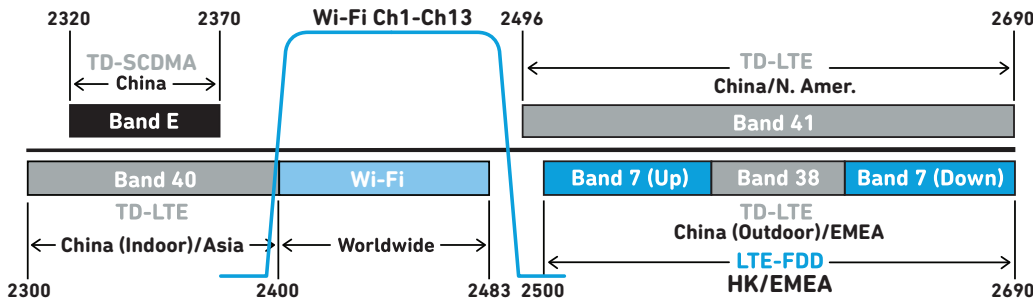
RFiFEM™

Complete Mobile Wi-Fi Solution

- LTE/Wi-Fi coexistence
- High-frequency performance 2.4 GHz & 5 GHz
- Wi-Fi calling
- Signal to noise ratio – poor SNR results in decreased available air time, capacity and throughput
- Interoperability issues – more radio devices/signals can increase retry rates, decreasing Wi-Fi performance
- Increased phone features and size reductions means more pressure to reduce solutions size



Spectrum Example of Asia & EMEA

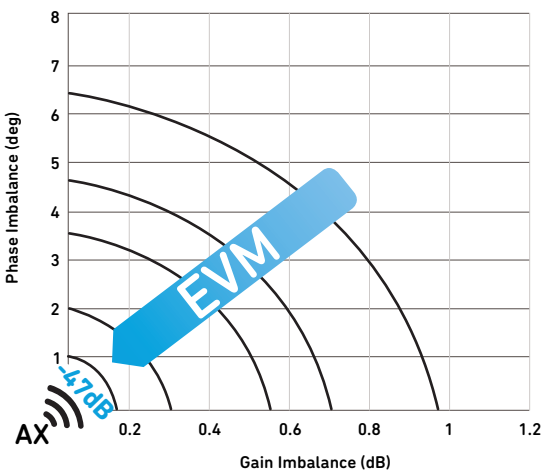
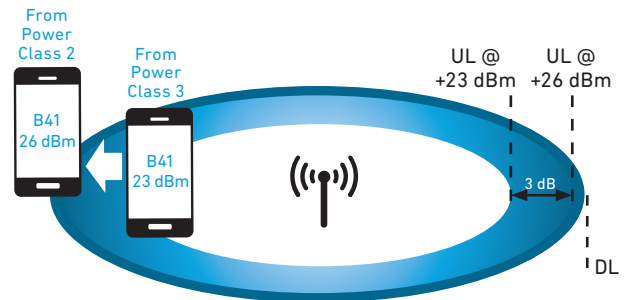


Solving the Wi-Fi coexistence challenge requires RF filters that are capable of rejecting closely adjacent frequencies.

A New Challenge

A new coexistence challenge is presented by Power Class 2, an emerging standard for higher output power in TD-LTE band 41 (2.5 GHz) and potentially other high frequency bands. Power Class 2 increases handset output power from 23 dBm to 26 dBm. The increase in output power compensates for greater propagation losses at higher frequencies enabling carriers to maintain cell coverage without adding expensive infrastructure.

The filtering challenge is to attenuate these higher power LTE signals sufficiently to protect the neighboring 2.4 GHz Wi-Fi spectrum. Greater filter attenuation is required to avoid interference.



More than half of the world's mobile data traffic is being offloaded onto the fixed network through Wi-Fi. Smartphones are addressing this need by adopting the latest 802.11 technology. Wi-Fi standards such as 802.11ac and 802.11ax require extremely low EVM (error vector magnitude) floors, high power, low current, coexistence and antenna sharing with 4x4 LTE MIMO.

Qorvo's iFEM solutions combine PA, LNA, switch and coexistence filter into a single package to address these technical challenges.

QORVO
all around you

RFiFEM™

Wi-Fi Solutions for a Rapidly Changing Landscape



Reference design



Qualified high-performance



Highly reliable



Less overhead



Less RF board area



Room for more features



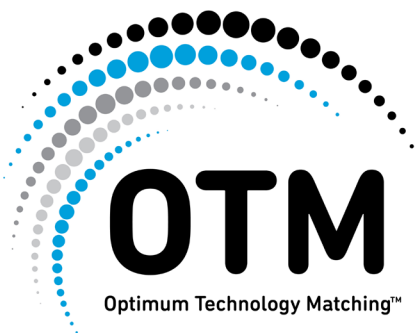
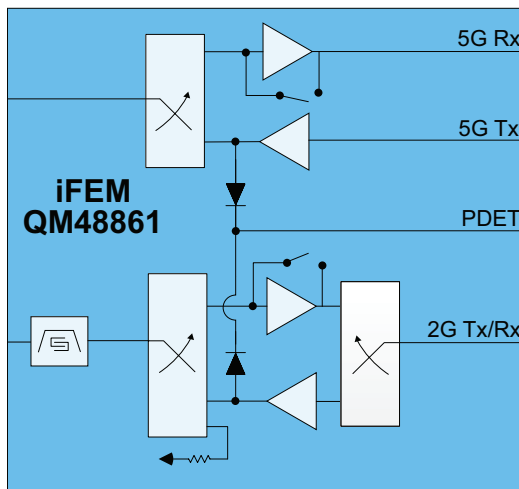
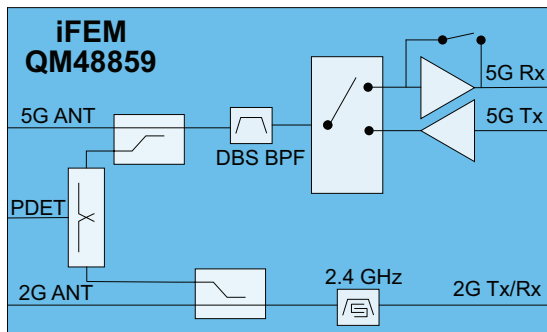
Minimal tuning/matching



Reduced time-to-market

Mobile Wi-Fi iFEM

- Integrated filters and actives
- 802.11ac 2x2 MIMO
- Dual band 2x2 configuration
- 802.11ac 1x1 SISO



A strategic approach used by Qorvo engineers to match the appropriate process, device and package technology to ensure precision performance.