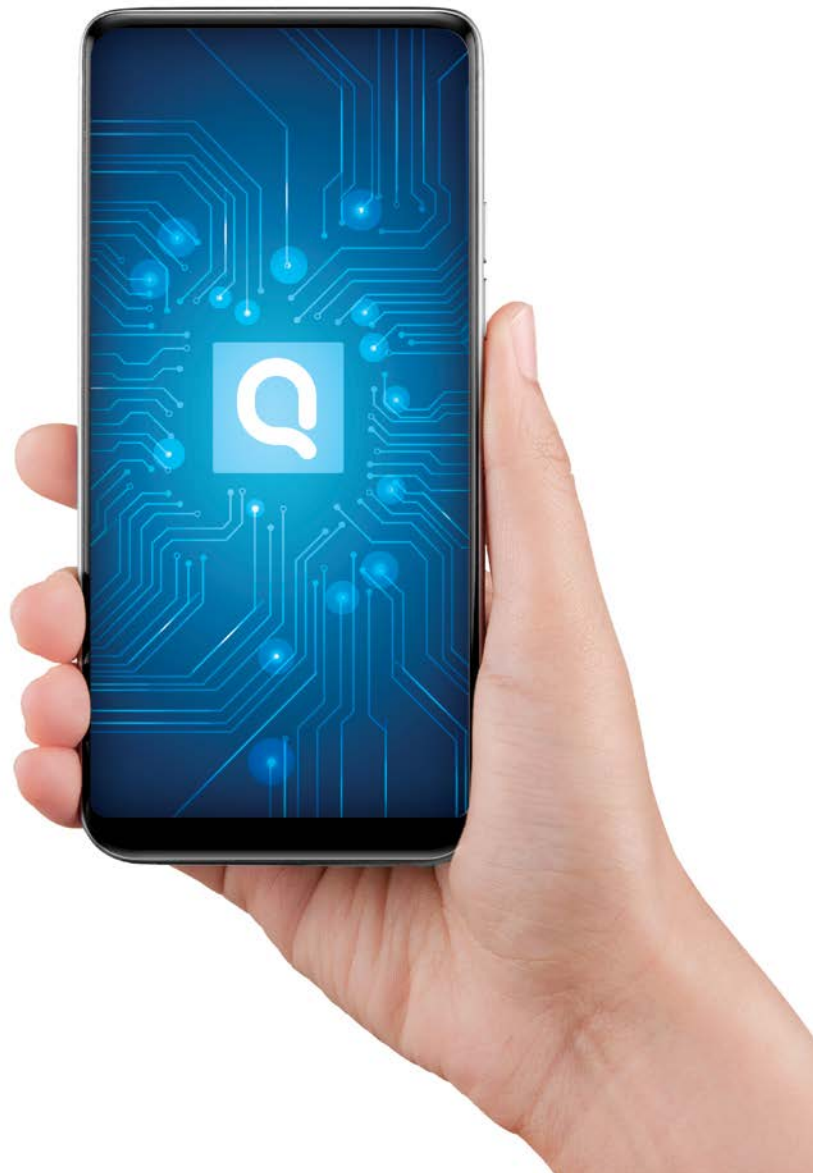# RF Fusion™

RF Integrated Solutions: Enabling Rapid Deployment
of High-Performance 4G & 5G Mobile Devices
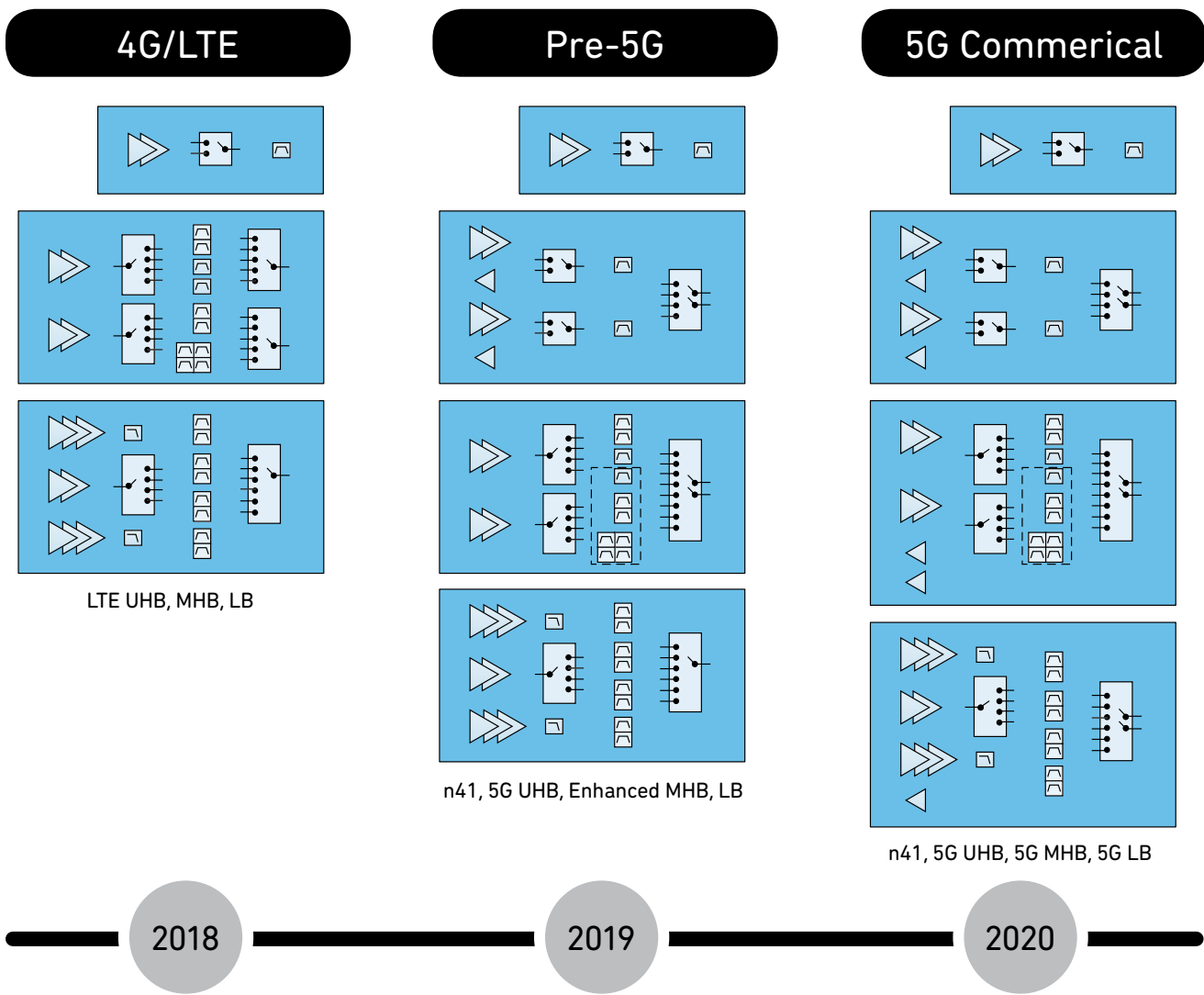
qorvo.

all around you

Technology Innovator. Trusted Supplier.

Qorvo is building on today's most successful open market, integrated solutions with new content and capability. Our goal is to leverage leading technology and systems expertise to solve challenging problems for all customers and markets.

- New high-performance RF PA cores meet power and linearity needs
- Optimized filters and multiplexers enable carrier aggregation (CA) and EN-DC cases
- LNA integration and new switch features improve device connectivity

Prepared Today for Tomorrow's 5G Challenges

RF Fusion is evolving in capability and adding functions and features in preparation for 5G commercialization. The latest generations add support for new and re-farmed 5G bands and EN-DC operation.

4G/LTE

LTE UHB, MHB, LB

Pre-5G

n41, 5G UHB, Enhanced MHB, LB

5G Commerical

n41, 5G UHB, 5G MHB, 5G LB

2018 — 2019 — 2020

Advanced LTE and pre-5G front-end architectures add content and increase antenna complexity, compounding losses in transmit and receive paths. New modulation schemes require more linear power than ever before. RF Fusion delivers industry-leading performance in fully proven integrated systems to enable and optimize the next wave of high-performance smartphones and connected devices.
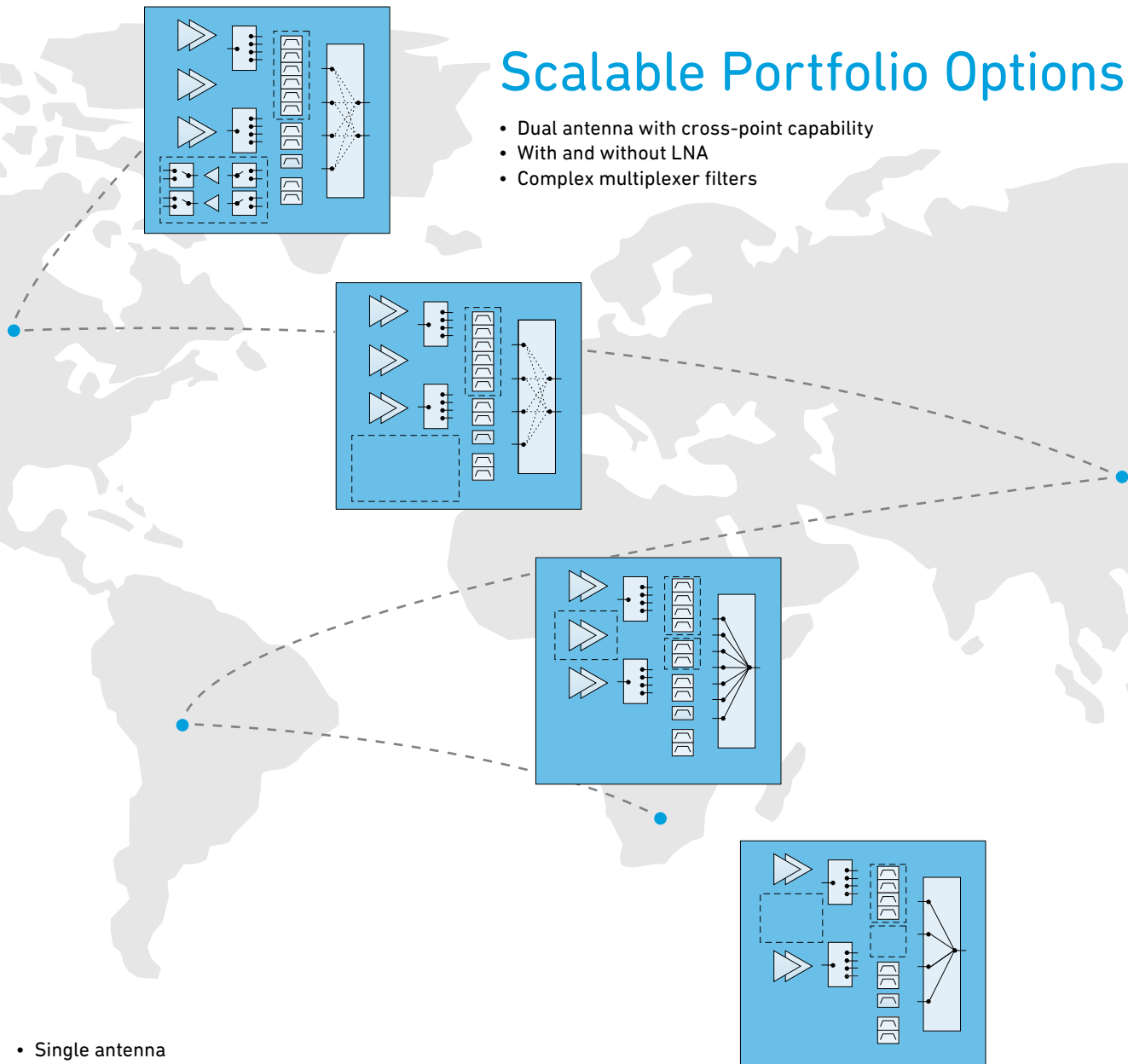
Offering Integration for All Device Needs

Today's mobile device manufacturers face challenges in implementation for all markets. High-feature, global smartphones struggle to optimize board area or solve difficult RF interference issues. Low-tier smartphones must manage cost while racing to market release. In the mid-tier, OEMs need to find a balance between performance and cost in an increasingly competitive environment. With 5G just around the corner, all of these challenges are further complicated by new bands, operating modes and specifications. Qorvo's RF Fusion portfolio offers a range of scalable options to improve performance, speed time to market and manage cost of implementation for all devices.
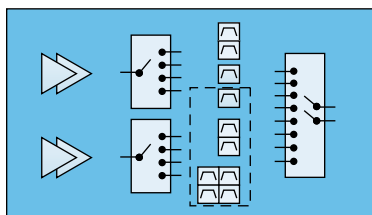
Scalable Portfolio Options

- Dual antenna with cross-point capability
- With and without LNA
- Complex multiplexer filters

- Single antenna
- Simplified multiplexers with switch options
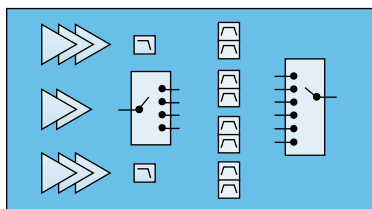- Regionally optimized PA and filter content

What RF Fusion Can Do For You

Qorvo's product portfolio offers choices for customers looking to optimize their mobile devices for global or regional use. Support for specific bands, CA or EN-DC features can be selected for any tier of device or for support of any combination of operator spectrum.

MHB P/N	CA 25 /66/30	CA 1+3	CA 39+41	CA 3+41	CA 3+40	CA 3+7	CA 1+3+7	CA 1+3+32	NR
QM78052	✔	✔	✔	✔	✔	✔	✔	✔	n41, n3
QM77138	A	✔	✔	✔	✔	✔	✔	✔	n41, n3
QM77038	A	✔	✔	✔ (120 MHz)	✔	✔	✔	✔	n41, n3
QM77038-1	A	✔	✔	✔ (120 MHz)	✔	✔	✔	✔	✖
QM77031	A	✔	A	A	A	A	A	A	✖
QM77030	A	✔	✔	S	✔	S	S	A	✖
QM77023	A	✔	✔	S	✔	✖	✖	A	✖
QM77040	A	✔	✔	S	✖	S	S	A	n41, n3
QM77040-1	A	✔	✔	S	✖	S	S	A	✖

LB P/N	2G	B26	B8	B12	B20	AUX
QM77033B	✔	✔	✔	✔	✔	4
QM77033	✔	✔	✔	✔	✔	4
QM77032	✔	✔	✔	A	A	2

✔ = Optimized for best performance   S = Supported   A = Requires external components   ✖ = Not supported

www.qorvo.com/rf-fusion

Qorvo®