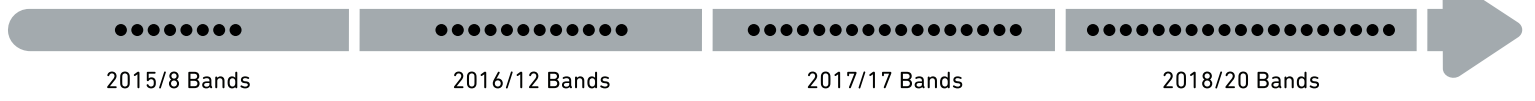


# Handset Designs for Regional Cellular Markets

Today's device manufacturers have to develop for a broad list of regional markets all with different requirements. Each device must be performance and cost optimized but flexible enough to be deployed in new regions with little redesign.

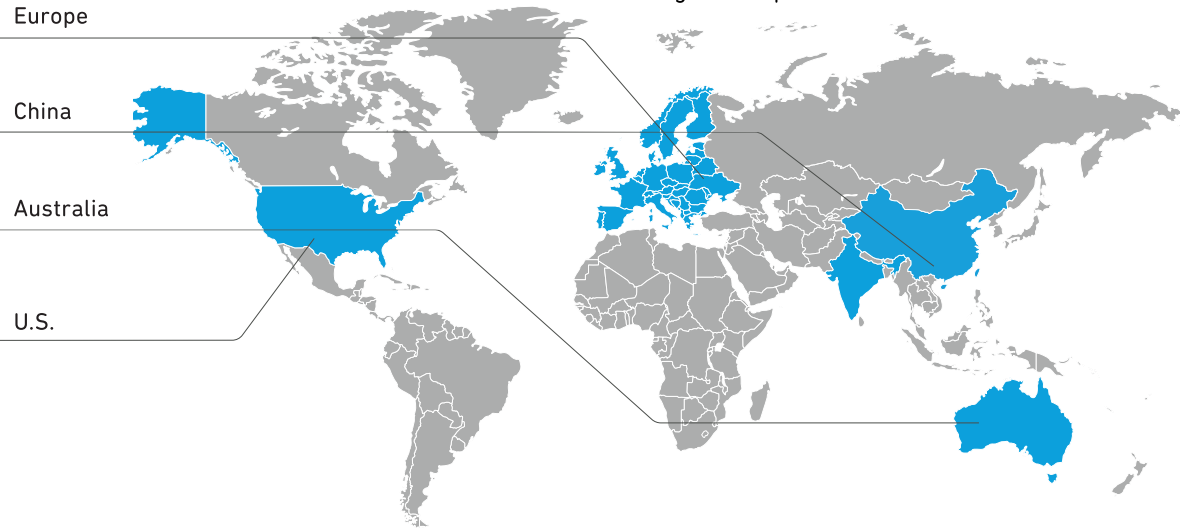


The typical frequency band count for mass market LTE devices is increasing rapidly each year. New bands, up to 20 or more in 2018, require more filters and a more capable front-end solution.

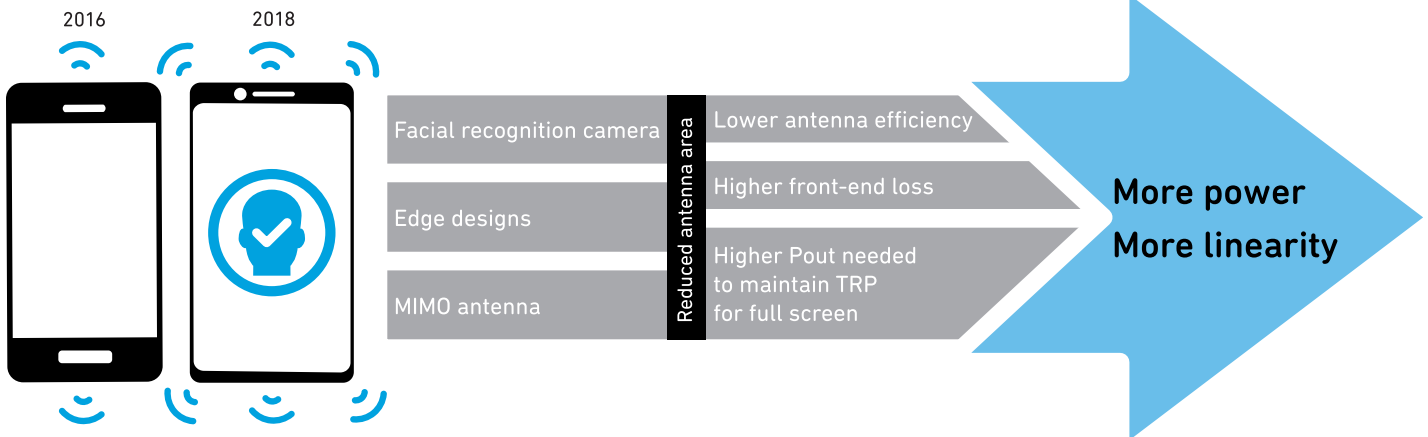
## Carrier Aggregation Coverage Requires New, Flexible Front-Ends

Diversity of carrier aggregation band combinations across regions is expanding rapidly. To enable these new combinations, front-end solutions have to connect to multiplexers and antennas in various ways depending on regional requirements.

Deployed	Planned
B3+7 B3+20 B7+20	3CA B3+3+7 B3+7+20
B39+41 B40 B1+3 B41 B39 B3	CM UL B1+3+8 B3+26 B1+3+5 B3+41 B41 HPUE B41+B41+B41 UL
B3+28 B3+5 B40	B7+28 3CA B3+7+28 B3+40+40
3CC DL B4+12 B2+45 B41+41+41 2+12+30 13+2	4CC 5CC Bandx+46 46+46+46(LAA) 2CC B66+65 2CC UL



## Reduced Antenna Area Requires Higher Power



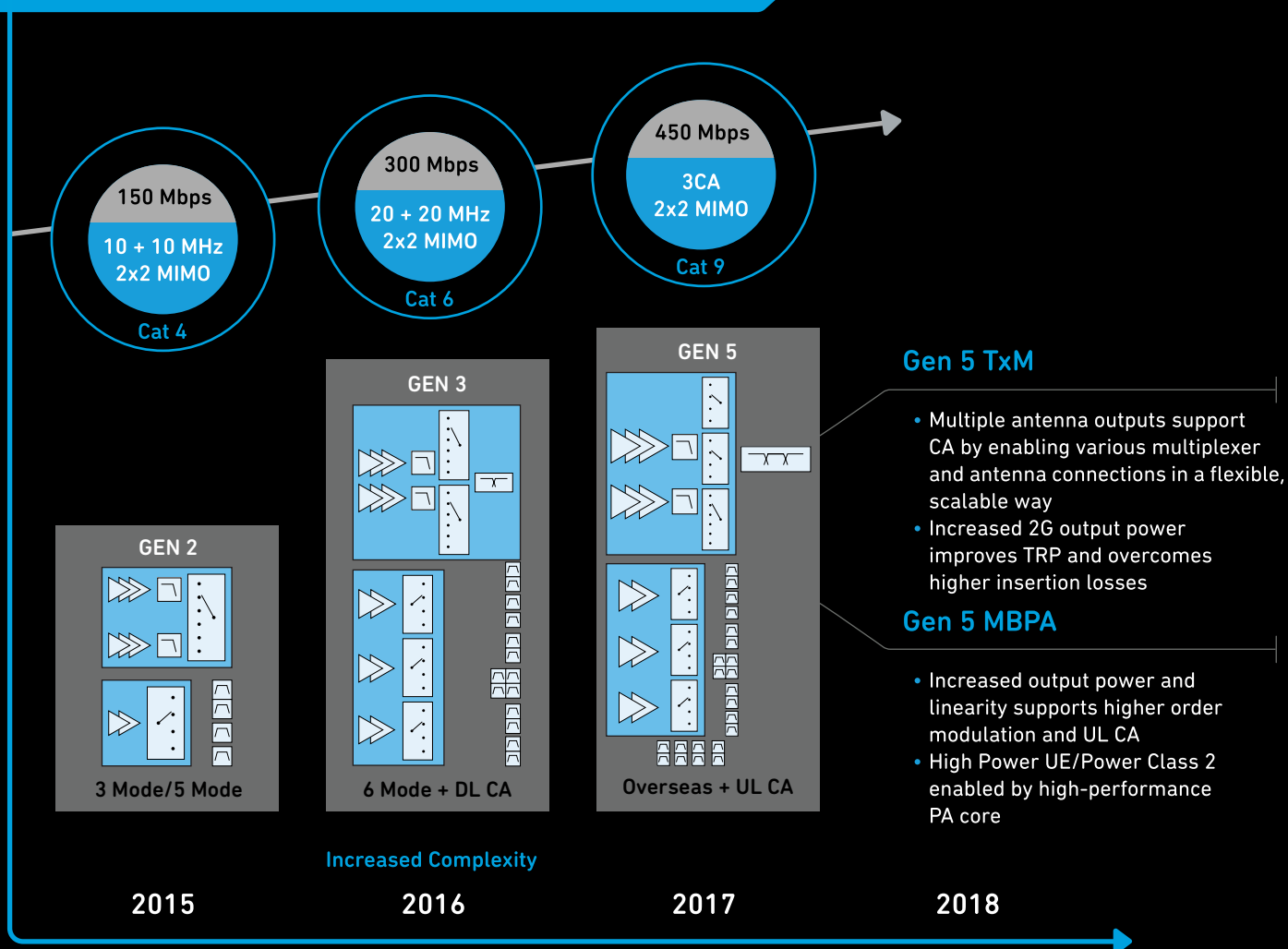
Flip to discover the Qorvo solution

# RFFLEX™

RF Flex™ enables solutions for regionally focused mid- and entry-tier LTE devices. These solutions provide the performance and size OEMs need while remaining flexible and scalable for the broad world market.

-  Solving advanced RF complexity
-  Optimized for flexibility & scalability
-  Right-sized integration
-  Broad portfolio addressing many sub-markets
-  Addressing power amplifier, switch & filter needs
-  Supported by world-class systems & applications team

## RF Flex LTE Solutions



Each new generation of RF Flex offers a higher level of performance and capability required by OEMs to meet changing market needs. Gen 5, Qorvo's latest generation of RF Flex, continues this trend through implementation of new technology to support 3+ downlink and select uplink carrier aggregation cases. Gen 5 brings OEMs a solution that is both globally capable and regionally optimized.