



Less Is More

RFMD Continues Integration of RF Functionality into Fewer Placements

Frank Stewart,

Director of Marketing, RFMD, Greensboro, NC, USA

fstewart@rfmd.com

RFMD is a global leader in the design and manufacture of high-performance radio frequency components and compound semiconductor technologies. RFMD's products enable worldwide mobility, provide enhanced connectivity and support advanced functionality in the cellular handset, wireless infrastructure, wireless local area network (WLAN), CATV/broadband and aerospace and defense markets. RFMD is recognized for its diverse portfolio of semiconductor technologies and RF systems expertise and is a preferred supplier to the world's leading mobile device, customer premises and communications equipment providers. Headquartered in Greensboro, N.C., RFMD is an ISO 9001- and ISO 14001-certified manufacturer with worldwide engineering, design, sales and service facilities.

Since its inception in 1991, RFMD has invested heavily in products for the cellular industry. This investment has resulted in the broadest portfolio of Power Amplifier -based and Switch -based products available, and RFMD is the leader in the majority of markets we serve. In the past 15 years, RFMD has focused on die and module integration of RF functionality. In the late 1990's, RFMD transitioned from primarily providing cellular Power Amplifier (PA) MMICs to PA modules. In the last decade, we have been a leader in the module integration of power amplifier and switch functionality to create Transmit Modules (TxM). RFMD is now driving next generation architectures with higher levels of die and module integration.

The architecture RFMD offers for the RF section of cellular devices varies, depending on the target market segment. For entry device segments, RFMD has enabled a single module placement for all RF functionality. All power amplification, switching, and filtering functionality for an entry level cellular device has been integrated into a single module placement. RFMD is now in production with the first generation of these single placement RF products.

For multi-mode, multi-band 3G/4G device segments, RFMD is driving toward integration of all RF functionality into two module placements. The recently introduced PowerSmart™ Power Platform is an example of the integration trend RFMD is driving. With PowerSmart™, RFMD has successfully integrated all power amplification, PA power management, and RF mode switching functionality into a highly integrated RF Configurable Power Core™. RFMD is also actively ramping Antenna Switch modules (ASMs), Switch Filter modules (SFMs), and Switch Duplexer Modules, which integrate all switching and filtering needs into a single placement.