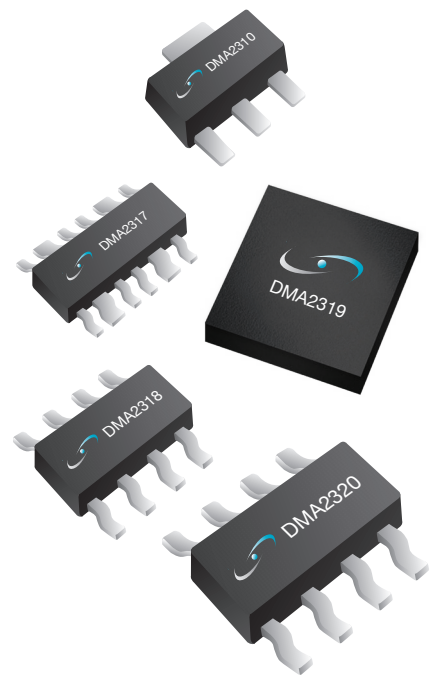


Surface Mount D3.1 Compliant MMIC Amplifiers

Ultra Linear CATV/Optical/SATCOM Amplifier ICs

Nearly 30 years of constant improvement yields the Duet Microelectronics DMA23xx family of ultra linear, high RF output, highest delivered bit efficiency RF amplifiers. Developed to power tomorrow's 1794 MHz, 1218 MHz, 1090 MHz, 1003 MHz, and lower frequency DOCSIS® 3.1 (D3.1) physical layer (PHY) compliant HFC/FTTx/HPON and Full Duplex (FD) networks with unmatched bit efficiency, the DMA2310, DMA2317 and DMA2318 single-ended (SE) 75-Ohm input-output (I/O) RF amplifiers, the DMA2319 flat-gain wide-bandwidth SIC-FreeSM D3.1 FD amplifier, and the DMA2320 push-pull (PP) MDU/MTU amplifier form the portfolio. Designers and OEMs of drop amplifiers, FTTx ONTs with RF overlay, DSGs and home media gateways, D-CCAP and R-MAC nodes benefit from the DMA231x family's Field-and-ForgetSM lowest cost per bit delivered performance.



Applications & Benefits

- Lowest Cost Per Bit Delivered Performance (Push-Pull Performance in a SE Design)
- Best-In-Class MER/BER for No Bit Error Digital content delivery over Long Distances
- Wide Single Voltage operating ranges (+5, +8, +12 Vdc) maximizing Application Flexibility
- 1794 MHz Bandwidth Compliance to DOCSIS® 3.1 enables advanced services (future-proof)
- D3.1 FD and SATCOM/S-MATV RF Amplifiers (maximum reach without repeaters)
- High-Reliability GaAs Technology for Field-and-ForgetSM trouble-free operation
- Easy-to-Use Surface Mount Packages with enhanced thermal performance

RF and Electrical Performance

Part Number	Gain @ MHz (dB)	Minimum MER @ MHz (db)	Typical CSO @ +24 dBmV/ch RFout (dBc)	Typical CTB @ +24 dBmV/ch RFout (dBc)	Typical IRL, 5-100 MHz (dB)	Typical Supply Current @ +8 Vdc (mA)	Typical BOM SMT Passive Count	Package
DMA2310	14.5 @ 210	>40 @ 210	-80	-78	>20	180	<10	SOT-89
DMA2317	14 @ 210	>50 @ 210	-80	-78	>20	180	<10	Batwing BW-16
DMA2318	14 @ 210	>50 @ 210	-80	-78	>20	180	<10	SOIC-8
DMA2319	13.5 @ 1794	>44 @ 1794	-80	-78	>22	180	<10	QFN-16
DMA2320	14 @ 210	>52 @ 210	-86	-78	>20	360	<15	SOIC-8

Other Duet Microelectronics Products



LNA ICs



FTTx Optical Receiver Modules



CBRS Transmit Module



5G mmW Transmit Modules

About Duet Microelectronics

Our singular focus is helping you build products that you couldn't make before. Since our founding in 2016, we have attracted the industry's top design, engineering, process technology and applications talent. Guided by veteran RF business leaders and supported by a robust supply chain, modern quality management, service and support systems, our team is able to offer top tier RF semiconductor technology, products, service and support.

So, trust Duet Microelectronics for your next project. We offer more than just RF...we deliver RF that works for you!

Contact us today to learn more about our products or discuss having an RFIC designed to your specifications!