

## CMX901 RF Power Amplifier

Wideband and High Efficiency

130MHz to 950MHz

The CMX901 is a three stage (Class A, AB, C) high-gain and high efficiency RF power amplifier providing a combination of load-ruggedness, low-cost and high-efficiency at VHF and low UHF frequencies.

### Features

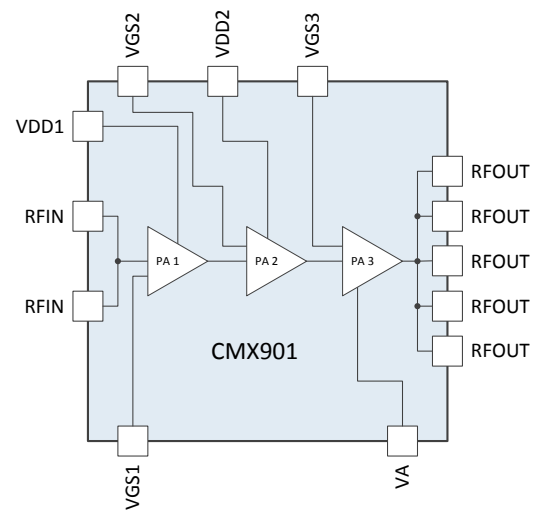
- Wide operating frequency range 130MHz to 950MHz
- Typical output power:
  - 2.5W operating at 160MHz
  - 1.8W operating at 435MHz
  - 1.5W operating at 915MHz
- High power gain up to 40dB
- High power added efficiency up to 60% at VHF
- Single polarity supply voltage 2.5V to 6V
- Small 28 pin WQFN package

### Applications

- Wireless data communications  
FSK, FFSK/MSK, GFSK/GMSK, Multi-level FSK
- Marine AIS Class-B
- Marine AIS-SART
- RFID readers/writers
- Automatic meter reading (AMR)
- Wireless sensor networks Mesh/Ad hoc systems
- Remote control and sensing systems
- Battery-powered commercial and consumer communications

### CMX901 Advantage

- Wide operating range 130MHz to 950MHz
- Small footprint WQFN package
- High gain (up to 40dB)
- High efficiency (up to 60% for VHF)
- Single polarity supply 2.5V - 6.0V
- High performance
- Attractive price/performance
- Robust, load VSWR 10:1 without damage
- Focused technical support available
- CML's product longevity record



CMX901 Function Block Diagram



Small 28-pin WQFN Package (5mm x 5mm)

Typical Performance	RF Frequency (MHz)		
	150	450	900
Efficiency (%)	60	52	42
Power Gain Pmax (dBm)	34	32.6	31.8
Output Power (W)	2.5	1.8	1.5



### EV9011 Evaluation Kit

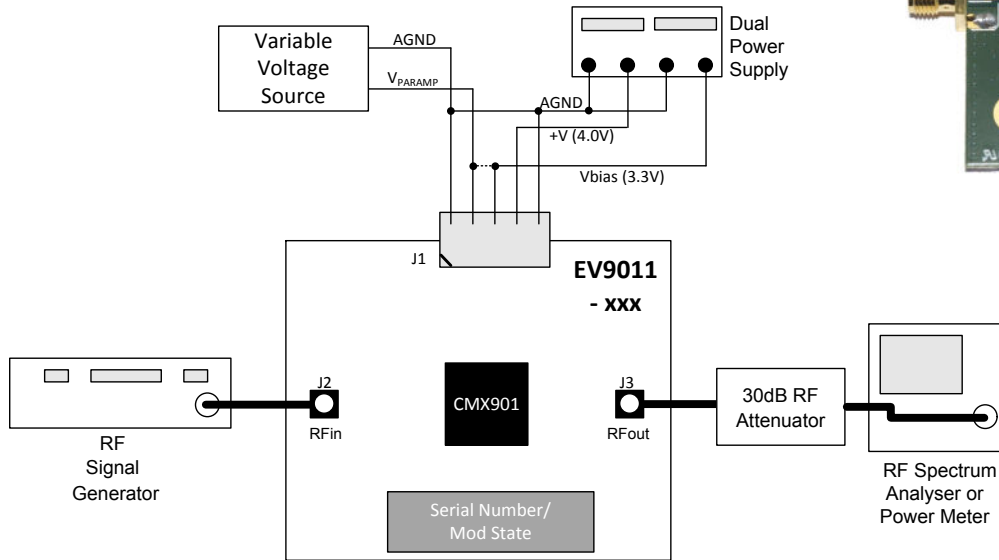
The EV9011 evaluation kit provides a convenient route to evaluating the CMX901 RF Power Amplifier.

The board is available in three RF frequency ranges:

- 150-170 MHz operation = EV9011-160
- 400-470 MHz operation = EV9011-435
- 900-930 MHz operation = EV9011-915



EV9011 Evaluation Kit



Typical Evaluation Connections for EV9011

## CML Microcircuits Benefits

### Faster time to market

Developing proven high performance and field tested ASSP ICs, CML is helping engineers to cope with increasing pressure in delivering shorter project design cycles.

### Design flexibility

CML's FirmASIC® reconfigurable technology with the use of a Function Image™ upload enables a single hardware platform to be used for multiple communications systems.

### High Quality

With 100% of products being tested before shipping, customers are assured of the highest reliability.

### Product Longevity

CML's product enjoys a long lifespan. Designing with CML, manufacturers are rewarded with longer product life cycles and a stable BOM, ensuring minimum engineering costs and maximum profit.

### Low Power

Being at the forefront of low power chip technology, manufacturers can develop smaller equipment with extended battery life.

### Superior Support

Internal and field based applications teams worldwide provide focused customer support to ease the development process.

**WHAT TO DO NEXT**

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