

RFFEM07C-10 Front End Module operates from 2 – 7 GHz and can be used in low-power S, C band applications. The input and output are matched to 50 ohms with on-chip DC blocking capacitors. The device is specifically designed for Wi-Fi 6, Bluetooth, Zigbee, IoT applications. The technology used to design the front-end module is the 0.1um GaAs pHEMT process. Results are shown in the datasheet with all parasitics & coupling effects at the desired frequency.

Features:

- RF Frequency: 2-7 GHz
- TX Gain of 28.4 dB
- RX Gain of 24 dB
- TX Output P1dB of 22.3 dBm
- RX Output P1dB of 20 dBm
- Noise Figure of 1.85 dB
- TX Bias: VDD=4V, VGG=- 0.65V, ID= 320mA
- RX Bias: VDD=4V, VGG=- 0.65V, ID= 58mA
- Die size: 2.4 mm x 2.3 mm

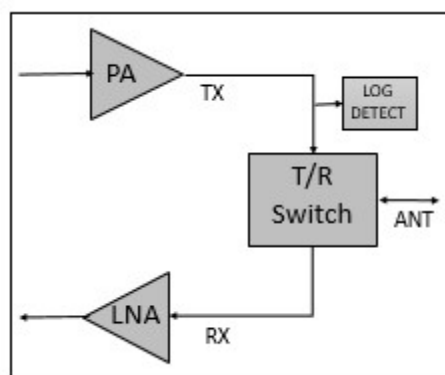
Application:

- Wi-Fi 6
- Bluetooth Application
- Zigbee
- Satellite Communication
- TDD/FDD System
- Internet of Things

Tech Specs:

- Part Number: RFFEM07C-10
- Provider: RFIC Solutions Inc.
- Foundry node: 0.1um GaAs pHEMT Win Semiconductors
- Porting: IP can be ported to 65nm Si / CMOS node

Functional Block Diagram:



Deliverables:

- Schematic and Netlist
- Abstract Model (.lib file)
- Layout View(Optional)
- Behavioral model (Circuit & EM simulation)
- Extracted View(Optional)
- GDSII
- DRC, LVS, Antenna report
- Test bench with configuration(Optional)
- Documentation

Contact Information

Email: smoghe@rficsolutions.com, Tel: (+1) 840 356 8957, (+91) 9022078131, (+91) 8485841789

RFIC confidential property not to be copied or disclosed without prior authorization.

www.rficsolutions.com

AUG 2024