

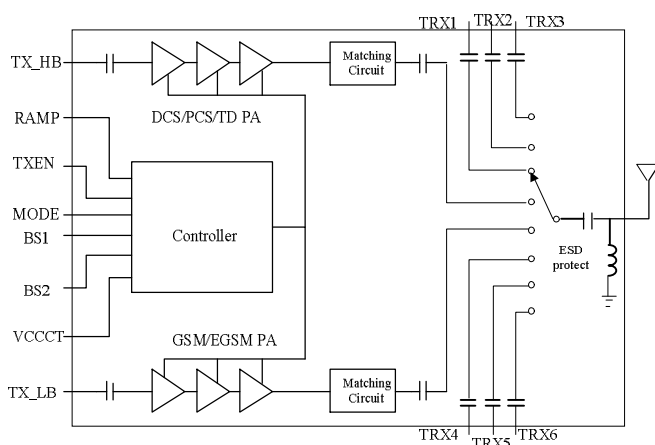
RDA6190 Front-end Module

The RDA6190 is a high-power, high-efficiency front-end Module. This device is designed for GSM/EDGE/WCDMA/TD-SCDMA handheld digital cellular equipment. The module consists of GSM/EDGE quad-band power amplifiers, TD-SCDMA dual-band power amplifiers and SP8T antenna switch. The switch in RDA6190 has six throw for external UMTS ports. The power amplifiers, switch and their controller are fabricated with HBT and CMOS respectively. The device package is 6mm×6mm×1.1mm 28-pins LGA. The input and output are realized on-chip matched to 50Ω. The RDA6190 requires few external components, simplifying PCB layout

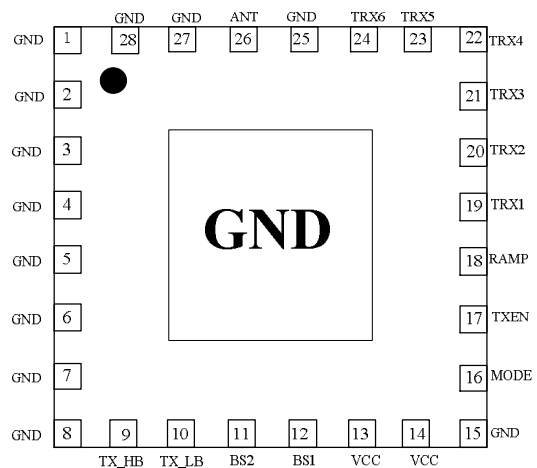
Features

- ┃ Ultra-Small 6mm×6mm Package
- ┃ Quad-Band GSM/EDGE Power Amplifiers
- ┃ Dual-band TD-SCDMA Power Amplifiers
- ┃ Six linear UMTS ports
- ┃ ESD protection at Antenna
- ┃ Complete Power Control Solution
- ┃ High efficiency
- ┃ Low supply voltage (3~4.5V)
- ┃ Input/Output matched @ 50 Ω
- ┃ Advanced HBT/ CMOS process

Function Block Diagram



Pin Assignment



Pin Name definition

Pin	Pin Name	Description	Pin	Pin Name	Description
1~8	GND	Ground	18	RAMP	Ramp control pin
9	TX_HB	DCS/PCS/TD RF input port	19	TRX1	Linear TRX port
10	TX_LB	GSM/EGSM RF input port	20	TRX2	Linear TRX port
11	BS2	Control logic pin	21	TRX3	Linear TRX port
12	BS1	Control logic pin	22	TRX4	Linear TRX port
13~14	VCC	Power supply	23	TRX5	Linear TRX port
15	GND	Ground	24	TRX6	Linear TRX port
16	MODE	Control logic pin	26	ANT	Antenna
17	TXEN	TX enable pin	25,27,28	GND	Ground