

MODULARIZED POWER AMPLIFIER DEVICES AND ARCHITECTURES

ABSTRACT

A packaged semiconductor chip includes a power amplifier die including a semiconductor substrate, and an input contact pad, an output contact pad, first and second direct-current (DC) contact pads, one or more transistors having an input coupled to the input contact pad, and an input bias coupling path electrically coupling the first DC contact pad to the second DC contact pad and the input contact pad implemented on the semiconductor substrate. The chip further includes a lead frame having one or more radio-frequency input pins electrically coupled to the input contact pad, one or more radio-frequency output pins electrically coupled to the output contact pad, and first and second input bias pins electrically coupled to the first and second DC contact pads, respectively.

[FIG. 7 and FIG. 8]