

WLAN PAs



Power Amplifier Solutions for 802.11a,b,g Applications

ANADIGICS WLAN POWER AMPLIFIERS

TECHNOLOGY

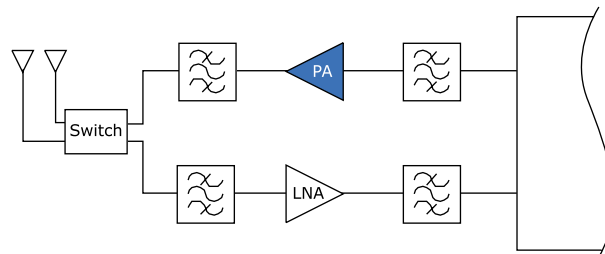
The message is simple: Linearity enables high data rates; Power enables range; Smart power and linearity enable long battery life. ANADIGICS' family of single and dual-band power amplifiers provide the WLAN industry with the best combination of linearity, power and efficiency. By optimizing the strengths of the InGaP HBT integrated circuit process, ANADIGICS PA products greatly enhance the performance of WLAN chipsets used in network interface cards and access points. Our unique proprietary technology and integration capability greatly reduces radio front-end component count and increases overall system ruggedness in high-volume manufacturing.

Single-Band Power Amplifiers

Part Number	Package Size (mm)	Function	Freq (GHz)	Supply (V)	Current (mA)	Gain (dB)	OP1dB (dBm)	ACPR @ 11 Mbps EVM* @ 54 Mbps
RFS P2010	3x3x1	802.11b PA 802.11g PA	2.4 - 2.5	3.3	b: 200 @ Pout = +23 dBm g: 110 @ Pout = +19 dBm	22	26	b: meets ACPR@ +23 dBm g: 3.0% @ Pout = +19 dBm
RFS P2020	3x3x1	802.11b PA 802.11g PA with detector	2.4 - 2.5	3.3	b: 215 @ Pout = +23 dBm g: 130 @ Pout = +19 dBm	30	27	b: meets ACPR @ +23 dBm g: 3.0% @ Pout = +19 dBm
RFS P2023	3x3x1	802.11b PA 802.11g PA with detector	2.4 - 2.5	3.3	b: 220 @ Pout = +23 dBm g: 135 @ Pout = +19 dBm	32	27	b: meets ACPR @ +23 dBm g: 2.5% @ Pout +19 dBm
AWL6152	4x4x1.5 Fully Matched Module	802.11b PA 802.11g PA	2.4 - 2.5	3.3	b: 360 @ Pout = +25 dBm g: 210 @ Pout = +21 dBm	30	-	b: meets ACPR @ +25 dBm g: 2.5% @ Pout = +21 dBm
				5.0	b: 500 @ Pout = +28 dBm g: 320 @ Pout = +25 dBm	30	-	b: meets ACPR @ +28 dBm g: 3.0% @ Pout = +25 dBm
RFS P5022	3x3x1	802.11a PA	4.9 - 5.9	3.3	180 @ Pout = +19 dBm	23	25	2.5% @ Pout = +19 dBm
RFS P5023	3x3x1	802.11a PA with detector	4.9 - 5.9	3.3	190 @ Pout = +19 dBm	30	26	3.0% @ Pout = +19dBm
RFS 1003	4x4x1	MESFET PA	5.15 - 5.85	7.0 3.0	400 350	20 21	29 24	
RFS 1006	4x4x1	MESFET PA	3.4 - 3.6	7.0	570	21	31	

* Increase in EVM over system EVM floor

Single-Band Application Schematic



THE STRENGTH OF DUAL BAND WLAN

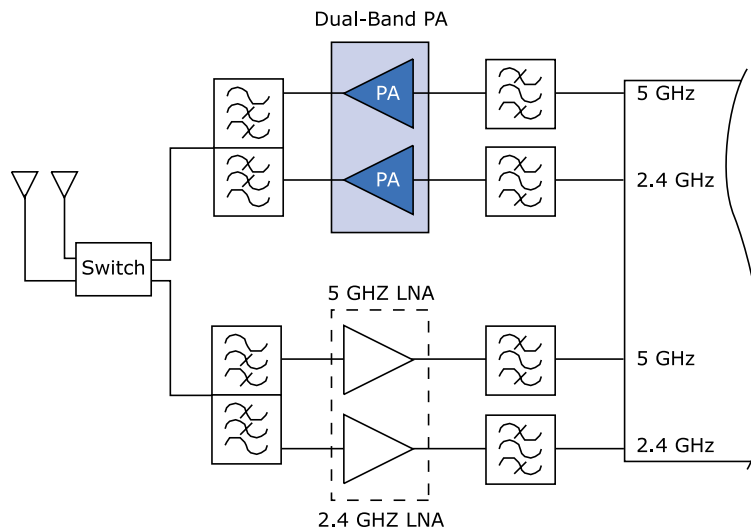
The current state of the WLAN marketplace can be a confusing one, though the end goals for all are very clear: Low-cost connectivity solutions that enable ubiquitous coverage and high data rates. To achieve this, the industry is fostering both the convergence and coexistence of the complimentary 802.11a, b, and g standards. The 11b and 11g standards are converging at 2.4 GHz, while the 11a standard coexists at 5 GHz. Several applications such as low-power handhelds focus on single-band implementations to maintain the necessary low price points. ANADIGICS offers several single-band power amplifiers in 3x3 mm packages to serve the needs of these applications.

To ultimately meet the mobile needs of the WLAN user, the system must have the ability to migrate seamlessly from one standard to another and back again, each time optimizing the user's coverage and data rate. ANADIGICS is developing this capability with cost-effective, high-integration dual-band power amplifiers that enable maximum range and data rates throughout the coverage area independent of the prevailing standard. With the functionality of three standards in one package, ANADIGICS' dual-band PAs offer high output power in the simplest, smallest implementation available.

Dual-Band Power Amplifiers

Part Number	Package Size (mm)	Function	Freq (GHz)	Supply (V)	Current (mA)	Gain (dB)	OP1dB (dBm)	ACPR @ 11 Mbps EVM @ 54 Mbps
AWLP9924	4x4x1	Dual Band PA with detector	2.4 - 2.5 4.9 - 6.0	3.3	TBD	TBD	TBD	TBD

Dual-Band Application Schematic





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SUNSTAR 商斯达实业集团是集研发、生产、工程、销售、代理经销、技术咨询、信息服务等为一体的高科技企业，是专业高科技电子产品生产厂家，是具有 10 多年历史的专业电子元器件供应商，是中国最早和最大的仓储式连锁规模经营大型综合电子零部件代理分销商之一，是一家专业代理和分销世界各大品牌 IC 芯片和电子元器件的连锁经营综合性国际公司，专业经营进口、国产名厂名牌电子元件，型号、种类齐全。在香港、北京、深圳、上海、西安、成都等全国主要电子市场设有直属分公司和产品展示展销窗口门市部专卖店及代理分销商，已在全国范围内建成强大统一的供货和代理分销网络。我们专业代理经销、开发生产电子元器件、集成电路、传感器、微波光电元器件、工控机/DOC/DOM 电子盘、专用电路、单片机开发、MCU/DSP/ARM/FPGA 软件硬件、二极管、三极管、模块等，是您可靠的一站式现货配套供应商、方案提供商、部件功能模块开发配套商。商斯达实业公司拥有庞大的资料库，有数位毕业于著名高校——有中国电子工业摇篮之称的西安电子科技大学（西军电）并长期从事国防尖端科技研究的高级工程师为您精挑细选、量身订做各种高科技电子元器件，并解决各种技术问题。

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