

wireless

we're right beside you





experience ANADIGICS

People expect to do more with wireless — talk longer with fewer battery recharges; communicate at high speed wherever they use their mobile phones, PDAs or laptops; combine voice, data and multimedia without compromise, and experience ever-increasing convenience and functionality.

ANADIGICS is helping to power the wireless revolution with industry-leading power amplifiers for wireless and broadband applications. As a recognized leader in high-volume manufacture of advanced GaAs RFICs, we're enabling OEMs and ODMs worldwide to build more capabilities into each new generation of products, even as they extend battery life and reduce size.

Equally important, we're with you at every step — from expert design and application assistance to planning and roadmaps for future generations of wireless devices. You'll not only save power with our energy-efficient products, but you'll also save engineering time by collaborating with ANADIGICS. Our goal is to power the world's most advanced and sophisticated wireless and broadband applications.

The ANADIGICS Advantage

- Exceptional performance
- Broad range of products supporting every major wireless standard
- Outstanding quality and reliability
- All products consistent with the RoHS environmental standard
- Manufacturing expertise and scaling
- Differentiating technology
- World-class application support centers located around the world



World-Class Integration and Performance for EV-DO Handsets Providing Even More HELP™ for Today's Sleek Handsets

Today's EV-DO handsets feature unprecedented levels of multimedia functionality that strains talk-time and challenges the form factor.

ANADIGICS' High-Efficiency-at-Low-Power (HELP™) power amplifiers use our patented InGaP-Plus™ technology to reduce average current consumption by up to 50% for HELP2™ (when compared with standard HBT devices) and 75% for HELP3™. This high level of efficiency increases talk-time and standby-time without the need for a DC-DC converter, allowing handset manufacturers to add more features to the phone, without sacrificing battery life. Our compact 3 x 3 mm HELP™ power amplifiers also reduce PCB space by providing an integrated voltage regulator. These power amplifiers are truly helping manufacturers create the sleek, feature-rich multimedia handsets that consumers demand.

Compact 3 x 3 x 1 mm and
3 x 5 x 1 mm packages

21% efficiency at +16 dBm

Industry-leading quiescent
currents for HELP3™ PAs

1xRTT and EV-DO
compliant for optimized
voice and high-speed data

Integrated voltage
regulator saves space,
simplifies design, and
reduces bill of materials

HELP2™ CDMA PA Family

Frequency (MHz)	Package Size (mm)	Output Power (dBm)	Efficiency (%)	Icq (mA)	ACLR (dBc)	Part Number
824 – 849 Cell Band	3 x 3 x 1	28	40 @ +28 dBm 21 @ +16 dBm	15	-50 @ 885 kHz -63 @ 1.98 MHz	AWT6307
1850 – 1915 PCS Band		28	40 @ +28 dBm 19 @ +16 dBm	15	-51 @ 1.25 kHz -56 @ 1.98 MHz -62 @ 2.25 MHz	AWT6308
1710 – 1780 AWS/KPCS Band		28	40 @ +28 dBm 22 @ +17 dBm	15	-50 @ 1.25 kHz -61 @ 2.25 MHz	AWT6309
824 – 849 Cell Band 1850 – 1915 PCS Band	3 x 5 x 1	28	39 @ +28 dBm 22 @ +16 dBm	15	-50 @ 885 kHz -65 @ 1.98 MHz	AWT6321

HELP3™ CDMA PA Family

Frequency (MHz)	Package Size (mm)	Output Power (dBm)	Efficiency (%)	Icq (mA)	ACLR (dBc)	Part Number
824 – 849 Cell Band	3 x 3 x 1	28	39 @ +28 dBm 20 @ +16 dBm	8	-51 @ 885 kHz -61 @ 1.98 MHz	AWC6311
1850 – 1915 PCS Band		28	40 @ +28 dBm 21 @ +15 dBm	8	-50 @ 1.25 MHz -58 @ 1.98 MHz -61 @ 2.25 MHz	AWC6312
898 – 925 Cell Band 1920 – 1940 IMT Band	3 x 5 x 1	28	38 @ +28 dBm 21 @ +15 dBm	8	-50 @ 885 kHz -63 @ 1.98 MHz	AWC6313

Switch to Zero Power Consumption

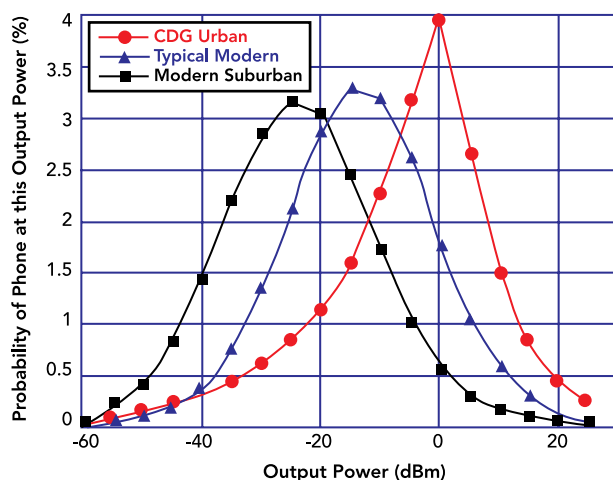
85% Less Current Extends Talk Time

The road to lower power consumption leads to the new ANADIGICS ZeroIC™ CDMA power amplifiers. These innovative devices slash average power consumption of the PA up to 85% compared to HELP™ power amplifiers. There is a lot of innovation involved in making ZeroIC™ PAs live up to the high ANADIGICS standards for reliability and performance.

ZeroIC™ products are designed with separate RF inputs to take advantage of transceivers capable of driving the antenna directly at low power levels. At lower levels, the ZeroIC™ PA switches modes to turn off and bypass the amplifier chain. The result is zero current consumption and zero quiescent current.



AWT6331



ZeroIC™ CDMA PA Family

Frequency (MHz)	Package Size (mm)	Output Power (dBm)	Efficiency (%) @ +28 dBm	Icq in Switched Mode (mA)	Leakage Current (μA)	Part Number
824 – 849 Cell Band	3 x 3 x 1 mm	+28	39	0	<10	AWT6331
1850 – 1915 PCS Band			37			AWT6332

Slashes average power consumption up to 85%

PA bypassed for "zero" current drain below the switching point

Compatible with QUALCOMM RTR6500 transceiver and QSC6055 single-chip solutions

Compact 10-pin 3 x 3 x 1 mm package

High-efficiency: 38% @ +28 dBm output

No quiescent current in switched mode

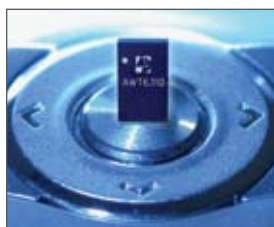
Supports 1xRTT and 1xEV-DO high-speed data

CDG Network Profile	Current Consumption (mA)*	
	HELP2™	ZeroIC™
Urban	35.7	22.3
Typical Modern Network	20.6	10.4
Suburban	15.2	1.6

*Probability weighted current consumption for PCS band CDMA PAs

Setting the Standard in Higher Density, Higher Performance Smaller Footprint, Bigger Performance

ANADIGICS' 3 x 3 x 1.1 mm power amplifiers for CDMA handsets maintain pin-to-pin compatibility with 4 x 4 mm power amplifiers, allowing you to save space with only minimal changes to board layout and no changes to software — for faster time-to-market. ANADIGICS is taking space savings to a higher level with its new family of dual-band CDMA power amplifiers. These power amplifiers use our advanced InGaP HBT technology to provide exceptional rugged reliability and performance stability over temperature extremes. They combine excellent linearity with low quiescent current for longer talk-times and standby-times.



AWT6310



- Space-saving 3 x 3 x 1.1 mm packages for compact single-band designs
- Space-saving 3 x 5 x 1 mm packages for compact dual-band designs
- Footprint compatible with earlier generations for faster design and minimal board changes
- Multiple bands and protocols supported
- Highly-integrated to reduce number of required external components

CDMA PA Family

Frequency (MHz)	Package Size (mm)	Output Power (dBm) Typ	Efficiency (%)	I _{cq} (mA)	Part Number
450 – 460 450 MHz Band	4 x 4 x 1 mm	29.5	38 @ +29.5 dBm	50	AWT6388
824 – 849 US Cell Band	3 x 3 x 1.1 mm	28	41 @ +28 dBm	50	AWT6301
1850 – 1910 PCS Band	3 x 3 x 1.1 mm	28	39 @ +28 dBm	50	AWT6302
824 – 849 US Cell 1850 – 1910 PCS Band	3 x 5 x 1 mm	28	39 @ +28 dBm 38 @ +28 dBm	50	AWT6310
824 – 849 US Cell 1850 – 1910 PCS Band	3 x 5 x 1 mm	28	39 @ +28 dBm 38 @ +28 dBm	50	AWT6314

Power Amplifiers for an Evolving World

Experience the ANADIGICS EDGE

Evolving GSM handset designs to provide faster data rates by using Enhanced Data for Global Evolution (EDGE) is not difficult when you partner with the right company. The EDGE standard has been adopted by most GSM operators worldwide either in combination with UMTS (WCDMA) or as a 3G upgrade to GSM/GPRS (2.5G) systems. ANADIGICS offers power amplifiers for both Polar and Linear EDGE architectures adopted by baseband chipset suppliers serving the EDGE market.

ANADIGICS' GSM/EDGE power amplifier designs support roaming in GSM frequencies worldwide, using either GMSK or 8PSK modulation. An internal reference voltage plus integrated bias and power control circuitry reduce external components and enable smaller handset designs. ANADIGICS' power amplifiers use InGaP HBT technology to achieve high-power, high-efficiency amplification and power control over a wide dynamic range.

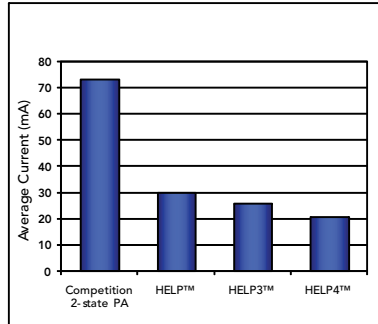
- **Quad-band support** for GSM850, GSM900, DCS, and PCS bands
- **Up to 35 dBm power output** in GSM mode
- **55 dB power control range** for longer battery life and excellent signal quality over a range of power levels
- **High-efficiency**, up to 55% for GSM850/900 bands and 50% for DCS/PCS bands in GSM mode
- **EGPRS Class 12 capable**

EDGE PA Family

Architecture/ Frequency	Package Size (mm)	Output Power (dBm) Typ	Efficiency (%)	2nd Harmonic (dBm)/ ACPR 400kHz (dBc) Typ	3rd Harmonic (dBm)/ ACPR 600kHz (dBc) Typ	Part Number
Polar Quad Band	5 x 5 x 1 mm	(GSM) GSM850/900: 35 DCS/PCS: 33 (EDGE) GSM850/900: 29 DCS/PCS: 28.5	(GSM) GSM850/900: 55 DCS/PCS: 51 (EDGE) GSM850/900: 28 DCS/PCS: 28	Less than -19 -64	Less than -18 -74	AWT6155
Linear Quad Band	5 x 5 x 1 mm	(GSM) GSM850/900: 35 DCS/PCS: 33 (EDGE) GSM850/900: 28.5 DCS/PCS: 27.5	(GSM) GSM850/900: 57 DCS/PCS: 52 (EDGE) GSM850/900: 25 DCS/PCS: 25	Less than -20 -64	Less than -20 -74	AWE6157
Linear Quad Band	6 x 6 x 1.1 mm	(GSM) GSM850/900: 35 DCS/PCS: 33 (EDGE) GSM850/900: 28.5 DCS/PCS: 27.5	(GSM) GSM850/900: 55 DCS/PCS: 52 (EDGE) GSM850/900: 22 DCS/PCS: 20	Less than -21 -66	Less than -20 -78	AWT6172
Polar Quad Band	7 x 7 x 1 mm	(GSM) GSM850/900: 35 DCS/PCS: 33 (EDGE) GSM850/900: 29 DCS/PCS: 28.5	(GSM) GSM850/900: 55 DCS/PCS: 52 (EDGE) GSM850/900: 29 DCS/PCS: 30	Less than -19 -64	Less than -27 -74	AWT6280
Polar Quad Band	5 x 5 x 1 mm	(GSM) GSM850/900: 35 DCS/PCS: 33 (EDGE) GSM850/900: 29 DCS/PCS: 28.5	(GSM) GSM850/900: 55 DCS/PCS: 51 (EDGE) GSM850/900: 28 DCS/PCS: 28	Less than -19 -64	Less than -18 -74	AWE6159
Polar Quad Band	6 x 6 x 1 mm	(GSM) GSM850/900: 35 DCS/PCS: 33 (EDGE) GSM850/900: 29 DCS/PCS: 28.5	(GSM) GSM850/900: 55 DCS/PCS: 50 (EDGE) GSM850/900: 30 DCS/PCS: 30	Less than -19 -64	Less than -19 -74	AWE6174

The Power-Saving Path to 3G HELP™ for Longer Talk Times

Our High-Efficiency-at-Low-Power (HELP™) technology sets the benchmark in efficiency and quiescent current at low and mid-range output power levels. The result is a handset that enables advanced multimedia applications with better battery life to provide wireless users with dramatically longer talk-time and standby-time. These outstanding levels of efficiency are made possible by ANADIGICS' proprietary InGaP-Plus™ technology, which integrates HBT and pHEMT structures on the same InGaP die. HELP™ WCDMA PAs support the High-Speed Downlink Packet Access (HSDPA) service, which provides support for higher UMTS download speeds while maintaining backward compatibility with WCDMA systems.



Average Current Consumption
over WCDMA Network Profile

20% or better efficiency at +16 dBm for lower average current consumption than competitive devices

Industry-leading quiescent currents for longer talk and standby times

Shutdown mode with leakage current <1

HSDPA support for ultra-high downlink speed

HELP™ WCDMA PA Family

Frequency (MHz)	Package Size (mm)	Output Power (dBm) Typ	Efficiency (%)	Icq (mA)	ACLR (dBm)		Part Number
					@5 MHz	@10 MHz	
824 – 849 Cell Band	4 x 4 x 1 mm	R99 WCDMA = 29 HSPA (MPR=0) = 28	44 @ +29 dBm 20 @ +16 dBm 15 @ +7 dBm	16	-40	-56	AWT6272
1850 – 1910 PCS Band	4 x 4 x 1 mm	R99 WCDMA = 29.5 HSPA (MPR=0) = 28.5	45 @ +29.5 dBm 21 @ +16 dBm 16 @ +7 dBm	15	-41	-56	AWT6276
1920 – 1980 IMT Band	4 x 4 x 1 mm	R99 WCDMA = 28.5 HSPA (MPR=0) = 27.5	44 @ +28.5 dBm 21 @ +16 dBm 16 @ +7 dBm	15	-40	-56	AWT6277

HELP3™ UMTS PA Family

Frequency (MHz)	Package Size (mm)	Output Power (dBm)	Efficiency (%)	Icq (mA)	ACLR (dBm)		Part Number
					@5 MHz	@10 MHz	
824 – 849 Cell Band	4 x 4 x 1 mm	R99 WCDMA = 29 HSPA (MPR=0) = 28	43 @ +29 dBm 20 @ +16 dBm 8 @ +8 dBm	7	-42	-55	AWT6273
1850 – 1910 PCS Band	4 x 4 x 1 mm	R99 WCDMA = 29.5 HSPA (MPR=0) = 28.5	41 @ +29.5 dBm 21 @ +16 dBm 9 @ +8 dBm	8	-42	-56	AWT6278
1920 – 1980 IMT Band	4 x 4 x 1 mm	R99 WCDMA = 28.5 HSPA (MPR=0) = 27.5	42 @ +28.5 dBm 23 @ +16 dBm 10 @ +8 dBm	8	-41	-55	AWT6279
880 – 915 EGSM Band	4 x 4 x 1 mm	R99 WCDMA = 29 HSPA (MPR=0) = 28	42 @ +9 dBm 21 @ +16 dBm 8.5 @ +8 dBm	7	-41	-53	AWT6281
1710 – 1785 AWS/KPCS Band	4 x 4 x 1 mm	R99 WCDMA = 28.5 HSPA (MPR=0) = 27.5	42 @ +28.5 dBm 20 @ +16 dBm 9 @ +8 dBm	8	-41	-56	AWT6282

Improving 3G Performance with Every Generation More HELP™ for Longer Talk Times

Designing a sleek 3G multimedia phone with long talk-times and fast UMTS network support is as simple as asking ANADIGICS for HELP™. Our third generation of High-Efficiency-at-Low-Power (HELP3™) UMTS power amplifiers use our proprietary InGaP-Plus™ technology to reduce average current consumption by 75%, compared with competing devices. Optimized for mobile phones and data cards, these power amplifiers allow power users to experience the full potential of today's 3G world without being tethered to a charger.



AWT6221



- Industry-leading efficiency reduces power consumption by 75%, compared with competing devices
- Low quiescent currents of 7–9 mA for longer talk and standby times
- HSDPA compliant
- Integrated voltage regulator saves space, simplifies design and reduces bill of materials

HELP3™ UMTS PA Family

Frequency (MHz)	Package Size (mm)	Output Power (dBm)	Efficiency (%)	Icq (mA)	ACLR (dBm)		Part Number
					@5 MHz	@10 MHz	
824 – 849 Cell Band 1850 – 1910 PCS Band	3 x 5 x 1 mm	(Cell) R99 WCDMA = 29 HSPA (MPR = 0) = 28 (PCS) R99 WCDMA = 29.5 HSPA (MPR = 0) = 28.5	(Cell) 42 @ +29 dBm 22 @ +16 dBm (PCS) 38.5 @ +29.5 dBm 17.5 @ +16 dBm	8	-41	-60	AWT6221
824 – 849 Cell Band 1920 – 1980 IMT Band (Japan)	3 x 5 x 1 mm	(Cell) R99 WCDMA = 29 HSPA (MPR = 0) = 28 (IMT) R99 WCDMA = 28.5 HSPA (MPR = 0) = 27.5	(Cell) 41 @ +29 dBm 22 @ +16 dBm (IMT) 40 @ +28.5 dBm 23 @ +16 dBm	8	-41	-61	AWT6222
880 – 915 900 MHz Band 1920 – 1980 IMT Band	3 x 5 x 1 mm	(900 MHz) R99 WCDMA = 29 HSPA (MPR = 0) = 28.5 (IMT) R99 WCDMA = 28.5 HSPA (MPR = 0) = 27.5	(900 MHz) 40 @ +29 dBm 20 @ +16 dBm (IMT) 40 @ +28.5 dBm 22 @ +16 dBm	8	-41	-62	AWT6224
1920 – 1980 IMT Band	3 x 3 x 1 mm	R99 WCDMA = 28.5 HSPA (MPR=0) = 27.5	42 @ +28.5 dBm 25 @ +17 dBm	8	-41	-55	AWT6241
1710 – 1785 AWS/KPCS Band	3 x 3 x 1 mm	R99 WCDMA = 28.5 HSPA (MPR=0) = 27.5	40 @ +28.5 dBm 21 @ +16 dBm	9	-41	-56	AWT6243

WiMAX/WiBro

High-Efficiency, High-Linearity for Fixed and Mobile Applications

WiMAX and WiBro systems give users high-speed data over longer distances. Our PA modules offer high efficiency and exceptionally high linearity to satisfy the demanding requirements of scalable OFDM modulation used in 4G standards. The result is longer operating times for mobile applications with excellent signal integrity. The PAs are fully compatible with advanced features such as quality of service (QoS) and low latency that support time sensitive and loss sensitive multimedia applications, including high-definition video and VoIP.



AWT6261

Integrated RF matching, and power detectors and attenuators, to reduce component count and save space

High-linearity, low-noise design for maximum signal fidelity over a wide range of conditions

High-efficiency for mobile applications

Low EVM to maintain high modulation accuracy for error-free transmission



802.16d Fixed-Point Applications

Frequency (MHz)	Package Size (mm)	Output Power (dBm)	Efficiency (%)	EVM (%)	Supply (V)	Gain (dB)	Integrated Attenuator	Integrated Detector	Part Number
2500 – 2700	4 x 4 x 1	+27	20	2.5	+5	30	N	N	AWT6262
3300 – 3600	4.5 x 4.5 x 1.4	+24	14	2.5	+6	27	Y	Y	AWM6430
3300 – 3600	4.5 x 4.5 x 1.4	+24	14	2.5	+6	27	Y	Y	AWM6432
3400 – 3600	4.5 x 4.5 x 1.4	+26	19	2.5	+6	26	Y	Y	AWM6436*
3500 – 3800	4.5 x 4.5 x 1.4	+24	14	2.5	+6	26	Y	Y	AWM6431

*New product under development



802.16e Mobile Applications

Frequency (MHz)	Package Size (mm)	Output Power (dBm)	Efficiency (%)	EVM (%)	Supply (V)	Gain (dB)	Integrated Attenuator	Integrated Detector	Part Number
1785 – 1805	4 x 4 x 1	+24.5	24	2.5	+3.4	31	N	N	AWT6288
2300 – 2400	4 x 4 x 1	+25.5	23	2.5	+3.4	28.5	N	N	AWT6235
2300 – 2400	4.5 x 4.5 x 1.4	+22		2.5	+3.3	31	Y	Y	AWM6422
		+23.5		2.5	+4.2				
		+23.5	20	4.0	+3.3				
		+25		4.0	+4.2				
2500 – 2700	4 x 4 x 1	+25	21	2.5	+3.4	30	N	N	AWT6261
2500 – 2700	4.5 x 4.5 x 1.4	+22		2.5	+3.3	31	Y	Y	AWM6423
		+23.5		2.5	+4.2				
		+23.5	20	4.0	+3.3				
		+25		4.0	+4.2				
2300 – 2700	4.5 x 4.5 x 1	+22		2.5	+3.3	31	Y	Y	AWM6424*
		+23.0		2.5	+4.2				
		+23.5	20	4.0	+3.3				
		+24.5		4.0	+4.2				
3400 – 3600	4.5 x 4.5 x 1	+22		2.5	+3.3	31	Y	Y	AWM6433*
		+23	20	4.0					
3300 – 3600	4 x 4 x 1	+25	21	2.5	+3.4	30	N	N	AWT6283*
2300 – 2700	4 x 4 x 1	+25	24	2.5	3.3	30	N	N	AWT6263
2300 – 2700	4 x 4 x 1	+25	24	2.5	3.3	30	Y	Y	AWT6264

*New product under development

Putting Smart Power in Mobility

As Simple as a, b, g

There's only one way to get the industry-leading combination of linearity, power and efficiency for WLANs: ANADIGICS. Benefit from higher power for better, wider wireless coverage, higher efficiency for longer battery life and better linearity for high, error-free data rates.

Our power amplifiers bring the same advanced technology to WLANs that has made us a leader in power amplifiers for wireless phones. With single or dual-band support for IEEE 802.11a/b/g/n, our products enhance the performance of WLAN chipsets, save space, reduce component count and enable maximum wireless coverage.



AWL6951



IEEE 802.11a/b/g/n

compatible to support all data rates and frequency bands

High-gain performance

up to 32 dB to maximize wireless coverage

Low EVM (<4%) to maintain high-modulation accuracy for error-free transmission

High-efficiency, power saving design for maximum battery life and enhanced signal transmission

WLAN 802.11 PA Family

Frequency (GHz)	Package Size (mm)	Gain (dB)	OP1dB (dBm)	Current (mA)	EVM @ 54 Mbps	Supply (V)	Part Number
2.4 – 2.5 4.9 – 5.9 802.11a/b/g	4 x 4 x 1.3	32	27	b: 200 @ +21 dBm g: 175 @ +20 dBm	g: 2.9% @ +20 dBm	3.0 – 4.4	AWL6951
		30	26.5	a: 175 @ +19 dBm	a: 3.3% @ +19 dBm		
2.4 – 2.5 802.11b/g	4 x 4 x 1.4	29.5	28	b: 250 @ +25 dBm g: 160 @ +21 dBm	g: 3% @ +21 dBm	3.3	AWL6153
		30.5	31	b: 350 @ +28 dBm g: 240 @ +25 dBm	g: 3.5% @ +25 dBm	5	
	3 x 3 x 0.9	32	27	b: 275 @ +23 dBm g: 200 @ +20 dBm	g: 3% @ +20 dBm	3.3	AWL9224
5.15 – 5.85 802.11a	3 x 3 x 0.55	33	25	a: 230 @ +18 dBm	a: 2.5% @ +18 dBm	3.3	AWL9555*

*New product under development

Industry-Leading Integration for Space-Saving Simplicity High Gain, Low Noise

Our front-end integrated circuits (FEICs) for WLAN applications offer industry-leading integration of power amplifiers, low-noise amplifiers and RF switches in compact packages well suited for notebook computers, PDAs, mobile phones and USB adapters. Save space without sacrificing performance. The FEICs cover the 2.4 GHz band for single-band 802.11b/g applications or both the 2.4 and 5 GHz bands for dual-band 802.11a/b/g applications. Their high performance and small size also make them ideal for multi-antenna 802.11n MIMO applications. For exceptional linearity to ensure signal integrity, the FEICs exhibit a low-error vector magnitude (EVM) of 4% or less and a linear power gain of up to 30 dB through the transmit chain.



AWL6254



- IEEE 802.11b/g/n **compatible** to support all data rates and frequency bands
- Low EVM (<4%)** to maintain high-modulation accuracy for error-free transmission
- High-efficiency, power saving designs** for maximum battery life and enhanced signal transmission
- Low-profile 0.55 mm plastic packages** for size-constrained applications

WLAN 802.11 Front-End Integrated Circuit Family

Frequency (GHz)	Package Size (mm)	Tx Gain (dB)	Tx Current (mA)	Tx EVM @ 54 Mbps	Supply (V)	Part Number
2.4 – 2.5 802.11b/g/n MIMO	3 x 3 x 0.55	27	b: 100 @ +18 dBm g: 80 @ +16 dBm	g: 4% @ +16 dBm	+3.3 to +4.2	AWL6254
	3 x 3 x 0.55	24	b: 185 @ +21 dBm g: 185 @ +21 dBm	g: 3.5% @ +20 dBm	+3.0 to +4.2	AWL9232
2.4 – 2.5 5.15 – 5.85 802.11a/b/g/n MIMO	4 x 4 x 0.55	30	b: 135 @ +19 dBm g: 100 @ +16 dBm	g: 3.5% @ +16 dBm	+3.0 to +3.6	AWL9942*
			a: 115 @ +16 dBm	a: 3.5% @ +16 dBm		
	4 x 4 x 0.55	30	b: 200 @ +22 dBm g: 170 @ +20 dBm	g: 3.2% @ +20 dBm	+3.0 to +3.6	AWL9966*
			a: 190 @ +18 dBm	a: 3.2% @ +18 dBm		

*New product under development

Optimized for the Most Demanding Air Interfaces**Build a Reliable, Efficient Wireless Infrastructure**

Our infrastructure power amplifiers offer outstanding reliability and performance for applications ranging from customer premises equipment (CPE) and femtocells to macrocells. Femtocells solve the problem of weak or nonexistent wireless broadband signals in SOHO environments by connecting user's mobile devices to their carrier's network through a high-speed Internet link. We pride ourselves with the success of our infrastructure power amplifiers that meet the stringent linearity and output power requirements of OFDMA standards such as 802.16 WiMAX. Our devices are manufactured on an advanced InGaP-Plus™ HBT MMIC technology offering state-of-the-art reliability, temperature stability and ruggedness. With our power amplifiers in your products, together we will lead the way in CPE and provide a high quality of service to our customers.

Our pre-drivers and drivers are multi-chip modules (MCMs) internally matched for band specific applications. Their linear range allows operations at rated power or as backed off drivers. Optional power detectors and step attenuators reduce the overall design complexity and save board area.

**AWB7220**

- **High-linearity** to support applications from femtocells to macrocells with the most demanding modulation schemes
- **High-reliability** for a reduced risk of field failures
- **Wideband** products for a variety of applications
- **Integrated RF** matching, and optional power detectors
- **High-efficiency** for improved reliability
- **Low-noise** for low distortion operation

Infrastructure Pre-Driver and Driver / Final Family

Frequency (MHz)	Package Size (mm)	Output Power (dBm)	Supply (V)	Gain (dBm)	PAE (%)	Part Number
2300 – 2700	7 x 7 x 1	+28	4.5	30	20	AWB7220
2500 – 2700	4 x 4 x 1	+27	4.5	30	20	AWB6262

Infrastructure Gain Block Family

Frequency (MHz)	Package Size	Supply (V)	Gain (dBm)	OIP3 (dBm)	P1dB (dBm)	NF (dB)	Part Number
250 – 3000	SOT89	5.0	13.0	43	21.0	2.0	AGB3300
250 – 3000	SOT89	9.0	13.5	45	23.0	2.4	AGB3301
DC – 5300	SOT89	8.0	16.0	36	18.0	4.5	AGB3302
DC – 4500	SOT89	8.0	21.0	39	19.0	4.0	AGB3303



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