

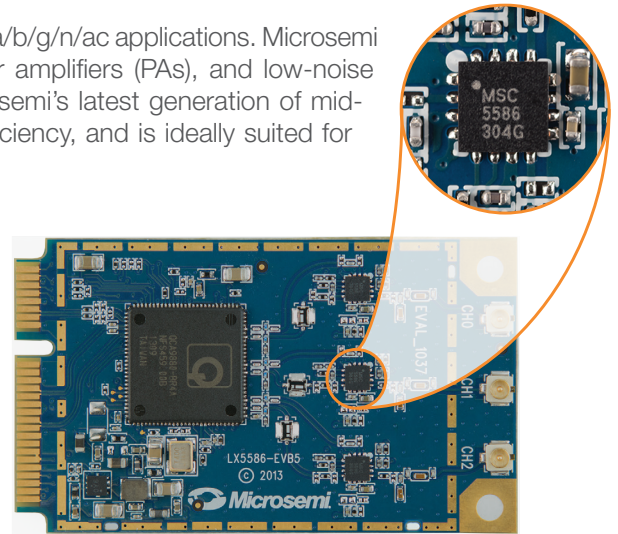
High-Performance Wi-Fi

Solutions for Customer Premise Equipment Applications

Microsemi has a growing portfolio of world-class RF products for Wi-Fi 802.11 a/b/g/n/ac applications. Microsemi Wi-Fi solutions include high-performance front-end modules (FEMs), power amplifiers (PAs), and low-noise amplifiers (LNAs). Featuring highly integrated monolithic RFIC design, Microsemi's latest generation of mid-powered FEMs is optimized for long-packet EVM performance and high efficiency, and is ideally suited for client-based access points, gateways, and 4K media streaming platforms.

Microsemi's 5-GHz/2-GHz FEM is the industry's first dual-band solution, integrating all functions for PA, LNA, switches, band-edge filter, diplexer, harmonic and out-of-band rejection, and impedance matching in a single monolithic die. Low current consumption, 3.3-volt supply, and 4mm-by-3mm compact size are ideal for smart television and OTT media platforms.

Microsemi's family of high-linearity power amplifiers features the latest in 2.4-GHz and 5-GHz amplifiers. With market-leading current consumption, Microsemi solutions deliver the high power required in newer 802.11ac systems, critical for thermal management of today's newer 4x4 and 8x8 MIMO configurations.



High-Linearity 2.4-GHz Amplifiers

Part Number	Freq (GHz)	802.11 Standard	Description	Gain (dB)	Linear Po (dBm)	EVM (%)	Vcc (V)	Current @ Po (mA)	Package (mm)
LX5511	2.3–2.5	n	PA + PDET	26.0	20	3.0	3.3	170	QFN-16, 3x3x0.9
LX5535	2.4–2.5	n	PA + PDET	32.0	24.5	3.0	3.3–5	260	QFN-16, 3x3x0.9
LX5518	2.4–2.5	n	PA + PDET	30.0	26	3.0	3.3–5	390	QFN-16, 3x3x0.9
LX5602	2.4–2.5	n	PA, Filtering, PDET	30.0	26	3.0	5	440	QFN-16, 3x3x0.9
LX5533	2.4–2.5	ac	PA, Filtering, PDET	30.0	24	1.8	5	380	QFN-16, 3x3x0.9

High-Linearity 5-GHz Amplifiers

Part Number	Freq (GHz)	802.11 Standard	Description	Gain (dB)	Linear Po (dBm)	EVM (%)	Vcc (V)	Current @ Po (mA)	Package (mm)
LX5530	4.9–5.9	n	PA + PDET	28.0	22	3.0	3.3–5	360	QFN-16, 3x3x0.9
LX5531	5.15–5.85	n	PA, Filtering, PDET	33.0	25	3.0	5	350	QFN-20, 4x4x0.9
		ac			23	1.8	5	290	

Low-Noise Amplifiers

Part Number	Freq (GHz)	802.11 Standard	Description	Gain (dB)	Noise Figure (dB)	IIP3 (dBm)	Current @ Po (mA)	Vcc (V)	Package (mm)
LX5561	2.4–2.5	b/g/n/ac	LNA	13	1.5	6.5	10.5	3.3	QFN-12, 2x2x0.5
LX5563	2.4–2.5	b/g/n/ac	LNA + Bypass	14	1.3	7.5	9	3.3	DFN-6, 1.5x1.5x0.5
LX5575	5.15–5.85	a/n/ac	LNA + Bypass	12	1.7	12	9	3.3–5	QFN-16, 2.5x2.5x0.45

Dual-Band Front-End Modules

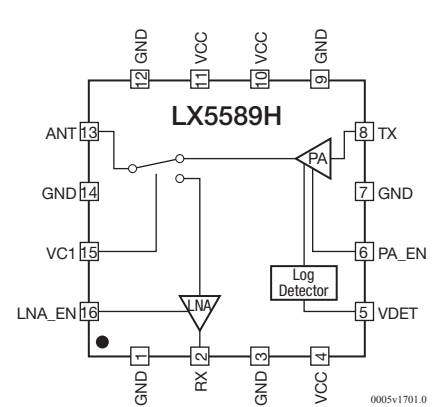
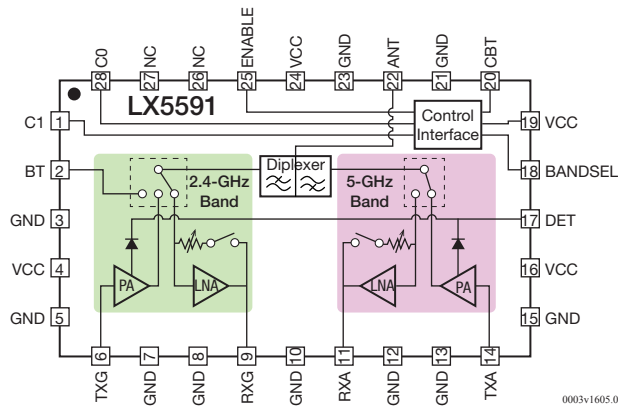
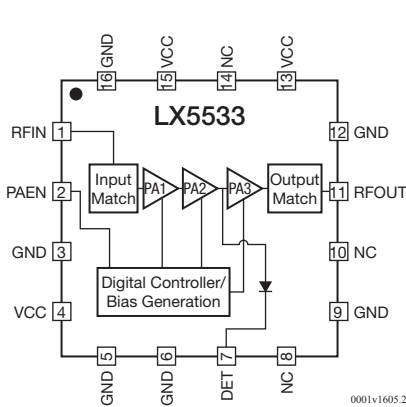
Part Number	Freq (GHz)	802.11 Standard	Description	Gain (dB)	Linear Po (dBm)	EVM (%)	Vcc (V)	Current @ Po (mA)	Package (mm)
NEW LX5591	2.4–2.5	n	Dual-Band PA + PDET + LNA with Bypass + SPDT	30	18	3.0	3.3	210	QFN-28, 4x3x0.9
		ac			16	1.8		190	
	5.15–5.85	n		27	18	3.0	3.3	260	
		ac			16	1.8		230	

High-Performance Wi-Fi

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Single-Band, High-Linearity Front-End Modules

Part Number	Freq (GHz)	802.11 Standard	Description	Gain (dB)	Linear Po (dBm)	EVM (%)	Vcc (V)	Current @ Po (mA)	Package (mm)
LX5551	2.4–2.5	n	PA + SPDT + PDET	27	18	3.0	3.3	140	QFN-16, 3×3×0.9
NEW LX5584A	2.4–2.5	n	PA + Log DET + LNA with bypass + SP3T	32	19	3.0	3.3	220	QFN-16, 3×3×0.9
		ac			18	1.8	3.3	200	
NEW LX5584B	2.4–2.5	n	PA + Log DET + LNA with Bypass + SP3T	33	21	3.0	5.0	260	QFN-16, 3×3×0.9
		ac			20	1.8	5.0	240	
NEW LX5584H	2.4–2.5	n	PA + Log DET + LNA with Bypass + SP3T	33	21	3.0	5.0	260	QFN-16, 2.5×2.5×0.9
		ac			20	1.8	5.0	240	
LX5586	5.15–5.85	n	PA + PDET + LNA with Bypass + SPDT	27	17.0	3.0	3.3	200	QFN-16, 2.5×2.5×0.4
		ac			16.0	1.8	3.3	185	
LX5586A	5.15–5.85	n	PA + PDET + LNA with Bypass + SPDT	27	17.5	3.0	3.3	200	QFN-16, 2.5×2.5×0.45
		ac			16.5	1.8	3.3	185	
LX5586H	5.15–5.85	n	PA + PDET + LNA with Bypass + SPDT	27	20	3.0	5.0	230	QFN-16, 2.5×2.5×0.45
		ac			19	1.8	5.0	210	
NEW LX5589A	5.15–5.85	n	PA + Log DET + LNA with Bypass + SPDT	30	18	3.0	3.3	210	QFN-16, 2.5×2.5×0.9
		ac			17	1.8	3.3	190	
NEW LX5589H	5.15–5.85	n	PA + Log DET + LNA with Bypass + SPDT	32	22	3.0	5.0	250	QFN-16, 2.5×2.5×0.9
		ac			20	1.8	5.0	230	
NEW LX5589B	5.15–5.85	n	PA + Log DET + LNA with Bypass + SPDT	32	22	3.0	5.0	250	QFN-16, 3×3×0.9
		ac			20	1.8	5.0	230	



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