

Recommended products

Function	Product	f _{min} (MHz)	f _{max} (MHz)	P1dB (W)	Type
HPA	Driver	700	2200	5	BLP7G22-05
		700	2200	10	BLP7G22-10
		700	2700	5	BLP8G27-05*
		700	2700	10	BLP8G27-10*
		3400	3600	10	BLF6G38-10(G)
	Driver/final	700	1000	45	BLP8G10S-45P(G)
		2300	2700	40	BLF6G27L(S)-40P
		3400	3800	25	BLF6G38(LS)-25
	Final	3400	3800	50	BLF6G38(LS)-50
		720	960	140	BLP7G07S-140P
		720	960	160	BLF6H10L(S)-160
		720	960	300	BLF8G10LS-300P
		820	960	270	BLF8G10LS-270W
		920	960	140	BLP7G09S-140P(G)*
		925	960	160	BLF8G10LS-160V
		1805	2025	80	BLP8G20LS-80P*
		1805	2170	60	BLC8G20LS-60AV*
		1427	2170	90	BLF7G20L(S)-90P
		1805	2025	160	BLP8G21S-160PV
		1805	1990	170	BLF8G19LS-170BV
		1805	1990	200	BLF8G20LS-200V
		1805	1990	310	BLC8G20LS-310AV*
		2000	2200	140	BLF8G22LS-140
		2000	2200	160	BLF8G22LS-160BV
		2110	2170	220	BLF8G22LS-220
		2110	2170	270	BLF8G22LS-270
		2110	2170	310	BLC8G22LS-360AV*
		2300	2700	60	BLC8G27LS-60AV*
		2300	2700	75	BLF7G27L(S)-90P
		2300	2400	100	BLF7G24L(S)-100
		2300	2400	240	BLF8G24LS-240AV
		2300	2400	160	BLF7G24L(S)-160P
		2300	2400	200	BLF8G24L(S)-200PN
		2500	2700	100	BLF8G27LS-100
		2500	2700	100	BLF8G27LS-100V
		2500	2700	100	BLF8G27LS-100P
		2500	2700	140	BLF8G27LS-140

* Check status in section 3.1, as this type is not yet released for mass production
For the complete product selection please see section 3.7.1

Function	Product	f _{min} (MHz)	f _{max} (MHz)	P1dB (W)	Type
HPA	Final	2600	2700	140	BLF8G27LS-140V
		2500	2700	140	BLC8G27LS-140AV*
		2500	2700	160	BLC8G27LS-160AV
		2300	2400	245	BLF8G27LS-245AV
		3400	3800	75	BLF8G38LS-75V
	Integrated Doherty	3400	3600	100	BLF6G38(LS)-100
		2010	2025	50 ⁽¹⁾	BLD6G21L(S)-50
	MMIC	2110	2170	50 ⁽¹⁾	BLD6G22L(S)-50
		720	960	30	BLM8G0710S-30PB(G)*
		1800	2200	40	BLM8G1822S-40PB(G)
		1800	2200	40	BLM8G1822S-40AB(G)*
		1800	2200	40	BLM8G1822S-60PB(G)*
		1800	2200	40	BLM8G1822S-80AB(G)*
		2000	2200	60	BLM7G22S-60PB(G)
		2200	2400	30	BLM7G24S-30B

⁽¹⁾ P3dB

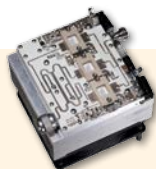
Doherty amplifier technology for state-of-the art wireless infrastructure

In order to achieve the highest efficiencies currently possible, NXP combines its latest generations of LDMOS technology with the Doherty concept. We offer the world's first fully integrated Doherty transistor but also reference designs for very efficient, high-power, discrete 2- and 3-way Doherty amplifiers.

The world's first fully integrated Doherty transistor looks like an ordinary Class-AB transistor but contains a splitter, main and peak devices, delay lines, and a combiner integrated inside the package. With the ease of design of an ordinary Class-AB transistor, it also provides significant space and cost savings. It is ideally suited for space-constrained applications like small-cell base stations and antenna arrays.

Product highlight

3-way Doherty BLF8G22LS-160BV



A 3-way Doherty design based on three BLF8G22LS-160BV devices achieves 48% efficiency at 49 dBm (80 W) average output power and 15.0 dB gain with a 2-carrier W-CDMA signal. It has a peak power capability (P3dB) of 57 dBm (500 W) at 28 V supply voltage. This design covers the W-CDMA standard for band one (2.11 - 2.17 GHz) operation and is tailored to very high peak power and volume manufacturing with high yields without tuning. Additional features are enhanced video bandwidth and an auto-biasing function.