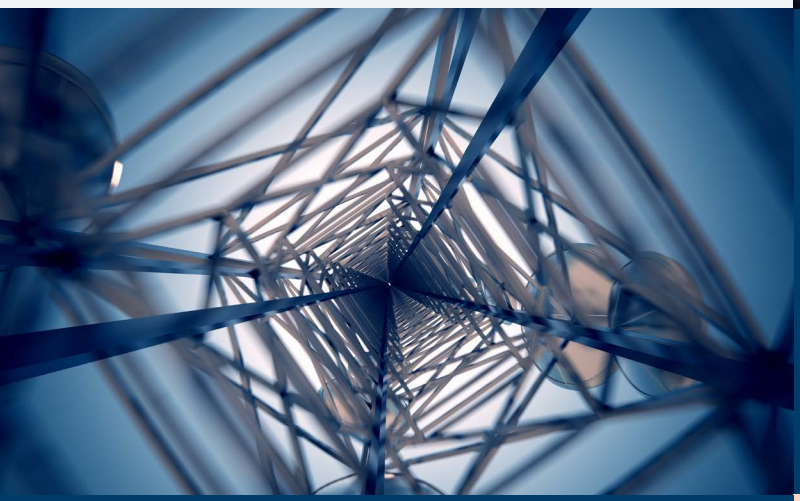
AMPLEON





Product Catalog

RF power solutions for
Wireless Infrastructure



October 2026

Advancing society through RF

Established in 2015, Ampleon embodies over five decades of leadership in RF power technology and is dedicated to unlocking the full potential of data and energy transfer within the RF spectrum. Our commitment to RF technology fuels our interactions with customers, suppliers, and partners, driving innovation and progress.

The advent of 5G NR (New Radio) since 2019 has ushered in a new era with demanding prerequisites for RF power components. Ampleon meets these challenges head-on by offering technology-agnostic solutions, harnessing cutting-edge **LDMOS, GaN**, and other semiconductor technologies for market leading RF power products.

Ampleon stands at the forefront, providing market leading RF power solutions for the **mMIMO** (Massive Multiple Input Multiple Output) up to 128 simultaneous transmit and receive streams, high efficiency **Small Cell**, and high-power **Macro** base stations.

A paradigm shift toward lowest power consuming systems and environmental consciousness compels base station requirements to also achieve unprecedented levels of RF power device efficiency. Simultaneously, the trend favoring higher power and wider bandwidth product solutions stimulate Ampleon's talented engineers to craft novel architectures and design methodologies, paving the way for more compact and discreet base stations.

Download the **latest** version

www.ampleon.com/mpc

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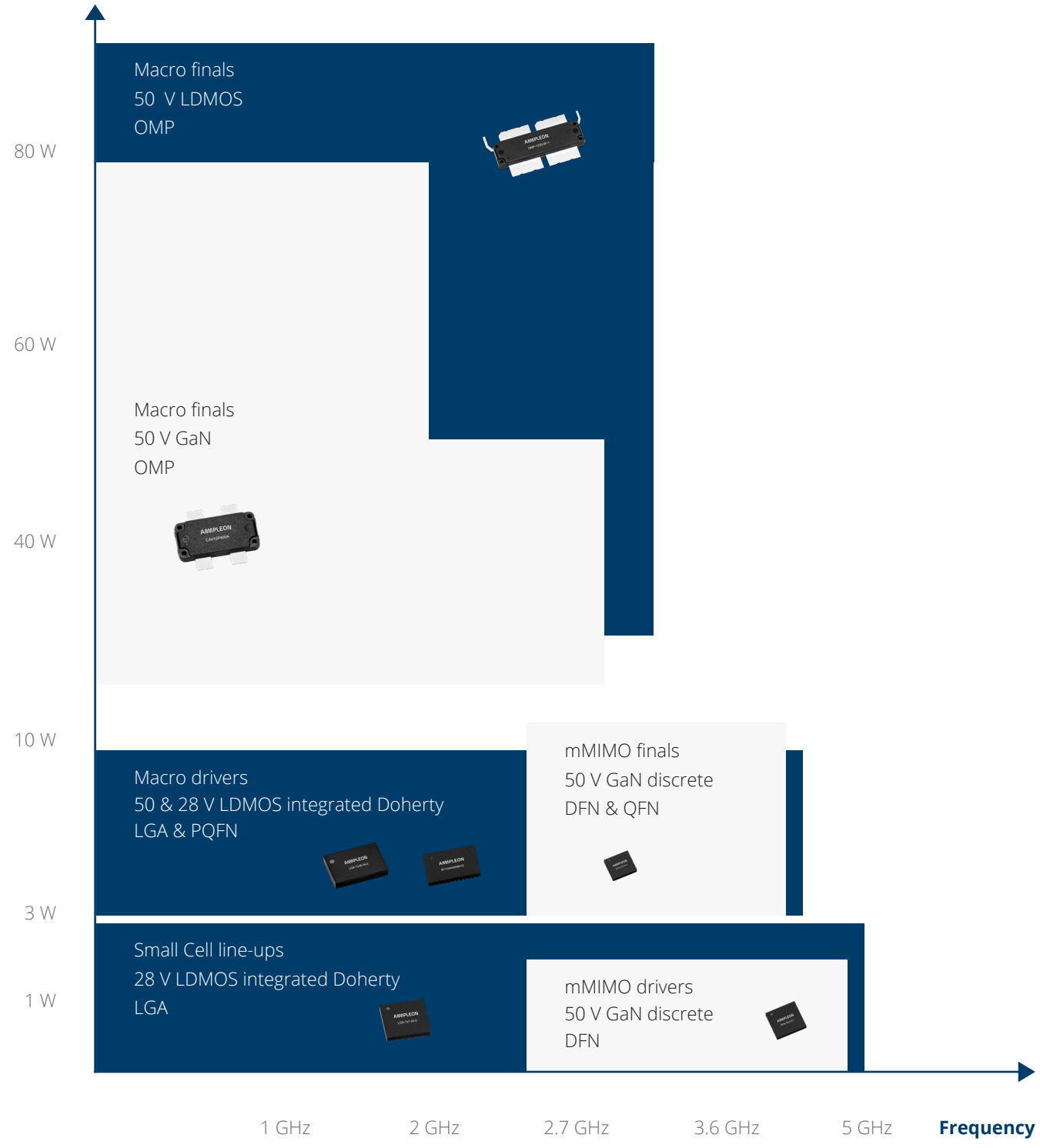
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Recommended PA solutions

Average output power



Base station product finder

The tool supports the selection of Ampleon's products for base station applications (Macro, massive MIMO and Small Cell) regarding frequency bands and target average power levels.

www.ampleon.com/support/rf-design-tools/base-station-product-finder



Macro products

Explore the RF power transistor selection guide at: www.ampleon.com/products/mobile-broadband, an intuitive resource featuring easy-to-use parametric filters to assist in identifying the right product for your specific design needs.

When opting for Ampleon's Macro solutions, you gain access to:

- A comprehensive array of solutions where Driver and Finals seamlessly integrate, catering to 4G, 5G, and future mobile requirements
- A fusion of top-tier, dependable GaN and LDMOS technology coupled with cost-effective, exceptional thermal packaging, and advanced design methodologies. These are manufactured and rigorously tested using highly automated volume-scale capabilities, delivering:
  - Consistently reliable performance
  - High line-up gain with minimal variation
  - Elevated linearized efficiency
  - Unprecedented power and efficiency from a single packaged transistor across diverse frequency bands
  - Streamlined, cost-effective line-up solutions facilitated by integrated drivers and Doherty optimized finals, resulting in compact designs

Macro finals

Frequency (MHz)	Type number	Package type	Package outline	P_{PEAK} (W)	V_{DS} (V)	η_D (%)	G_p (dB)	Recommended driver	Status
600–960	BLP9H10S-350A	OMP-780	OMP-780-4F-1	450	48	53	18.6	BLP9H10-30G	Production
600–960	BLP9H10S-500AWT	OMP-780	OMP-780-6F-1	620	48	52.5	17.6	BLP9H10-30G	Production
600–1000	C4H10P800A	OMP-780	OMP-780-4F-1	800	50	61.1	18.3	B10H0710N40D	Production
617–960	BLP9H10S-850AVT	OMP-1230	OMP-1230-6F-1	850	48	52	18	BLM9H0610S-60PG	Production
700–1000	C4H10P600A	OMP-780	OMP-780-4F-1	600	48	62.4	18.7	BLP9H10-30G	Production
1432–1517	C4H15P400A	OMP-780	OMP-780-4F-1	300	50	57	18.4	BLP9G0722-20G	Production
1800–2200	C4H22P400A	OMP-780	OMP-780-4F-1	300	48	60	16	C4H2327N55P	Production
2300–2400	C4H24F550AV	ACC-780	SOT1249B	550	48	50.8	16.1	B11G2327N71D	Production
2496–2690	C4H27F400AV	ACC-780	SOT1249B	400	48	56.5	15.1	B11G2327N71D	Production
2496–2690	C4H27F700AV	ACC-780	SOT1249B	700	52	51	15	B11G2327N71D	Production
2620–2690	C4H27P400A	OMP-780	OMP-780-4F-1	400	50	58	14	B10G2327N55D	Production

Macro drivers

Frequency (MHz)	Type number	Package type	Package outline	P_{PEAK} (W)	V_{DS} (V)	η_D (%)	G_p (dB)	Technology	Status
100–2700	BLP9G0722-20G	TO-270	SOT1483-1	20	28	22	19	LDMOS	Production
600–800	B10H0608N40D	LGA-12x8	LGA-12x8-34-2	49	48	27	30	LDMOS	Production
600–1000	BLM9H0610S-60PG	OMP-780	OMP-780-16G-1	60	48	11	35.5	LDMOS	Production
617–960	BLP9H10-30G	TO-270	SOT1483-1	30	50	14	18.3	LDMOS	Production
700–1000	B10H0710N40D	LGA-12x8	LGA-12x8-34-2	50	48	25	31	LDMOS	Production
1400–1600	B10H16N40D	LGA-7x7	LGA-7x7-20-3	47	48	24	32.6	LDMOS	Production
1800–2200	B10H1822N60D	LGA-7x7	LGA-7x7-20-3	56	48	21	29	LDMOS	Production
1800–2200	BLM9D1822-30B	PQFN-8x8	SOT1462-1	39	28	26	30	LDMOS	Production
1800–2200	B11G1822N60D	PQFN-12x7	PQFN-12x7-36-1	70	28	29	30	LDMOS	Production
1800–2200	B11G1822N120D	PQFN-12x7	PQFN-12x7-36-1	125	30	27	30	LDMOS	Production
2300–2400	B10H24N70D	LGA-7x7	LGA-7x7-20-3	70	48	20.1	30.7	LDMOS	Production
2300–2700	BLM9D2327-26B	PQFN-8x8	SOT1462-1	31.6	28	27	29.3	LDMOS	Production
2300–2700	BLM9D2327S-50PBG	OMP-780	OMP-780-16G-1	58	28	25.7	29	LDMOS	Production
2300–2700	B11G2327N72D	PQFN-12x7	PQFN-12x7-36-1	72	28	30	31.2	LDMOS	Production
2300–2700	B11G2327N71D	PQFN-12x7	PQFN-12x7-36-1	85	28	22	30	LDMOS	Production
2496–2690	B10H27N70D	LGA-7x7	LGA-7x7-20-3	70	48	21.0	30.1	LDMOS	Production
3300–3800	B11G3338N81D	PQFN-12x7	PQFN-12x7-36-1	80	28	25	34	LDMOS	Production
3400–3800	BLM10D3438-35AB	PQFN-8x8	SOT1462-1	35	28	23	33.4	LDMOS	Production
3700–4200	B11G3742N81D	PQFN-12x7	PQFN-12x7-36-1	80	28	20	32	LDMOS	Production
4400–5000	B11G4450N91D	PQFN-12x7	PQFN-12x7-36-1	90	28	13	30.4	LDMOS	Production
4800–5000	C5H4850N55D	QFN-8x8	QFN-8x8-20-1	55	50	48.2	13.3	GaN	Production

Massive MIMO products

Explore the RF power transistor selection guide at: www.ampleon.com/products/mobile-broadband, an intuitive resource featuring easy-to-use parametric filters to assist in identifying the right product for your specific design needs.

When opting for Ampleon's massive MIMO (mMIMO) solutions, you gain access to:

- Ampleon's robust mMIMO portfolio, leveraging LDMOS and GaN discrete and integrated Doherty solutions, delivering consistently high performance within a compact form factor. This facilitates cost-effectiveness and simplicity in 4G and 5G mMIMO power Amplifiers (PAs):
  - Excellent DPD linearization achieved through Ampleon's LDMOS and GaN technologies
  - Compact footprint tailored to meet space constraints in mMIMO systems
  - High line-up gain
  - Unwaveringly consistent performance
  - Proven track record of reliable high-volume supply, ensuring consistent availability

mMIMO line-up

Frequency (MHz)	Type number	Package type	Package outline	P_{PEAK} (W)	V_{DS} (V)	η_D (%)	G_p (dB)	Technology	Status
2300–2690	C4H2327N110A	DFN-7x6.5	DFN-7x6.5-6-1	110	50	57	15	GaN	Production
2300–2700	BLM9D2327-26B	PQFN-8x8	SOT1462-1	32	28	42	29	LDMOS	Production
2300–2700	B10G2327N55D	PQFN-8x8	SOT1462-1	55	28	43	27.5	LDMOS	Production
2300–5000	C4H2350N10	DFN-4.5x4	DFN-4.5x4-6-1	10	50	15.5	19	GaN	Production
2500–2700	BLM10D2327-40AB	PQFN-8x8	SOT1462-1	43	28	45	29	LDMOS	Production
3400–3800	BLM10D3438-35AB	PQFN-8x8	SOT1462-1	35	28	41	33	LDMOS	Production
3300–3700	C5H3337N110D	QFN-8x8	QFN-8x8-20-1	110	48	55	14.5	GaN	Production

mMIMO finals

Frequency (MHz)	Type number	Package type	Package outline	P_{PEAK} (W)	V_{DS} (V)	η_D (%)	G_p (dB)	Technology	Status
2300–2690	C4H2327N55P	DFN-7x6.5	DFN-7x6.5-6-1	50	50	55	16.7	GaN	Production
2300–2690	C4H2327N110A	DFN-7x6.5	DFN-7x6.5-6-1	110	50	57	15	GaN	Production
3400–3800	C5H3438N110D	QFN-8x8	QFN-8x8-20-1	110	48	55	15	GaN	Production
3300–3700	C5H3337N110D	QFN-8x8	QFN-8x8-20-1	110	48	55	14.5	GaN	Production
3400–3801	G1M3438P70C	LGA-12x8	LGA-12x8-34-3	70	48	48	30	GaN	Production
3400–4000	C5H3440N70D	QFN-8x8	QFN-8x8-20-1	63	48	51.6	12.7	GaN	Production
4800–5000	C5H4850N55D	QFN-8x8	QFN-8x8-20-1	55	50	48.2	13.3	GaN	Production

mMIMO drivers

Frequency (MHz)	Type number	Package type	Package outline	P_{PEAK} (W)	V_{DS} (V)	η_D (%)	G_p (dB)	Technology	Status
1800–5000	C5H2350N10	DFN-4.5x4	DFN-4.5x4-6-1	10	48	13	15.8	GaN	Production
1805–1880	BLM9D1819-08AM	LGA-7x7	LGA-7x7-20-1	8	28	43.5	27.5	LDMOS	Production
1805–1880	B10G1819N10DL	LGA-7x7	LGA-7x7-20-2	10	28	45.2	32.2	LDMOS	Production
1880–2025	BLM9D1920-08AM	LGA-7x7	LGA-7x7-20-1	8.9	28	42	26.8	LDMOS	Production
2110–2170	BLM9D2022-08AM	LGA-7x7	LGA-7x7-20-1	8	28	40.7	26.6	LDMOS	Production
2110–2170	B10G2022N10DL	LGA-7x7	LGA-7x7-20-2	8.9	26	48.5	50.5	LDMOS	Production
2300–2400	BLM9D2324-08AM	LGA-7x7	LGA-7x7-20-1	8	28	42.5	27	LDMOS	Production
2300–2400	B10G2324N10DL	LGA-7x7	LGA-7x7-20-2	9.1	28	46.1	31.3	LDMOS	Production
2300–5000	C4H2350N05	DFN-4.5x4	DFN-4.5x4-6-1	5	48	13	18.5	GaN	Production
2300–5000	C4H2350N10	DFN-4.5x4	DFN-4.5x4-6-1	10	50	15.5	19	GaN	Production
2496–2700	BLM9D2527-09AM	LGA 7x7	LGA-7x7-20-1	9	28	46.6	26.5	LDMOS	Production
2500–2700	B10G2527N10DL	LGA-7x7	LGA-7x7-20-2	9.3	28	45.4	30	LDMOS	Production
3300–3600	B10G3336N16DL	LGA-7x7	LGA-7x7-20-2	16	28	35	35	LDMOS	Production
3300–3650	BLM9D3336-12AM	LGA-7x7	LGA-7x7-20-2	12	28	30	31.8	LDMOS	Production
3300–3650	BLM9D3336-14AM	LGA-7x7	LGA-7x7-20-2	14	28	33.7	32.4	LDMOS	Production
3400–3800	BLM9D3438-16AM	LGA-7x7	LGA-7x7-20-2	16	28	24.3@ 0.8 W	32.5	LDMOS	Production
3500–3800	BLM9D3538-12AM	LGA-7x7	LGA-7x7-20-2	12	28	30.8	32	LDMOS	Production
3600–4000	B10G3640N16DL	LGA-7x7	LGA-7x7-20-2	16	28	22	36	LDMOS	Production
3700–4000	BLM9D3740-16AM	LGA-7x7	LGA-7x7-20-2	16	28	31.3@ 1.6 W	31.2	LDMOS	Production
3800–4200	BLM9D3842-16AM	LGA-7x7	LGA-7x7-20-2	16	28	28.5@ 1.6 W	30.2	LDMOS	Production
4700–5000	B10G4750N12DL	LGA-7x7	LGA-7x7-20-2	12	28	32	30	LDMOS	Production

Small Cell products

Explore the RF power transistor selection guide at: www.ampleon.com/products/mobile-broadband, an intuitive resource featuring easy-to-use parametric filters to assist in identifying the right product for your specific design needs.

When opting for Ampleon's Small Cell solutions, you gain access to:

- LDMOS technology breakthrough within the GaAs dominated small cell market, offering:
  - Up to 300 MHz instantaneous bandwidth
  - Enhanced output power for expanded coverage
  - High linearized efficiency
  - Excellent DPD linearization capabilities
  - Compact product line in standardized package footprints, ensuring seamless deployment and integration

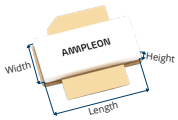
Small Cell

Frequency (MHz)	Type number	Package type	Package outline	P_{PEAK} (W)	V_{DS} (V)	η_D (%)	G_p (dB)	Technology	Status
728–821	BLM9D0708-05AM	LGA-7x7	LGA-7x7-20-2	5	28	39.5	17.8	LDMOS	Production
859–960	BLM9D0910-05AM	LGA-7x7	LGA-7x7-20-2	5	28	38.4	18	LDMOS	Production
1805–1880	BLM9D1819-08AM	LGA-7x7	LGA-7x7-20-1	8	28	43.5	27.5	LDMOS	Production
1805–1880	B10G1819N10DL	LGA-7x7	LGA-7x7-20-2	10	28	45.2	32.2	LDMOS	Production
1880–2025	BLM9D1920-08AM	LGA-7x7	LGA-7x7-20-1	8.9	28	42	26.8	LDMOS	Production
2110–2170	BLM9D2022-08AM	LGA-7x7	LGA-7x7-20-1	8	28	40.7	26.6	LDMOS	Production
2110–2170	B10G2022N10DL	LGA-7x7	LGA-7x7-20-2	8.9	26	48.5	50.5	LDMOS	Production
2300–2400	BLM9D2324-08AM	LGA-7x7	LGA-7x7-20-1	8	28	42.5	27	LDMOS	Production
2300–2400	B10G2324N10DL	LGA-7x7	LGA-7x7-20-2	9.1	28	46.1	31.3	LDMOS	Production
2496–2700	BLM9D2527-09AM	LGA-7x7	LGA-7x7-20-1	9	28	46.6	26.5	LDMOS	Production
2500–2700	B10G2527N10DL	LGA-7x7	LGA-7x7-20-2	9.3	28	45.4	30	LDMOS	Production
3300–3600	B10G3336N16DL	LGA-7x7	LGA-7x7-20-2	16	28	35	35	LDMOS	Production
3300–3650	BLM9D3336-12AM	LGA-7x7	LGA-7x7-20-2	12	28	30	31.8	LDMOS	Production
3300–3650	BLM9D3336-14AM	LGA-7x7	LGA-7x7-20-2	14	28	33.7	32.4	LDMOS	Production
3400–3800	BLM9D3538-12AM	LGA-7x7	LGA-7x7-20-2	12	28	30.8	32	LDMOS	Production
3400–3800	BLM9D3438-16AM	LGA-7x7	LGA-7x7-20-2	16	28	24.3@ 0.8 W	32.5	LDMOS	Production
3600–4000	B10G3640N16DL	LGA-7x7	LGA-7x7-20-2	16	28	22	36	LDMOS	Production
3700–4000	BLM9D3740-16AM	LGA-7x7	LGA-7x7-20-2	16	28	31.3@ 1.6 W	31.2	LDMOS	Production
3800–4200	BLM9D3842-16AM	LGA-7x7	LGA-7x7-20-2	16	28	28.5@ 1.6 W	30.2	LDMOS	Production
4700–5000	B10G4750N12DL	LGA-7x7	LGA-7x7-20-2	12	28	32	30	LDMOS	Production

Package portfolio

Ampleon's package overview us available on www.ampleon.com/packages

Air-Cavity Ceramic (ACP) packages*



Package type
Package outline
(L x W x H (mm))



ACC-780
SOT1249B
(20.02 x 9.53 x 4.75 (mm))

Overmolded Plastic (OMP) packages*



DFN-4.5x4
DFN-4.5x4-6-1
(4.5 x 4.0 x 0.85 (mm))



DFN 7x6.5
DFN-7x6.5-6-1
(7.0 x 6.5 x 0.85 (mm))



LGA-7x7
LGA-7x7-20-1
(7.0 x 7.0 x 0.98 (mm))



LGA-7x7
LGA-7x7-20-2
(7.0 x 7.0 x 0.98 (mm))



LGA-7x7
LGA-7x7-20-3
(7.0 x 7.0 x 1.13 (mm))



LGA-12x8
LGA-12x8-34-2
(12.0 x 8.0 x 0.98 (mm))



LGA-12x8
LGA-12x8-34-3
(12.0 x 8.0 x 1.13 (mm))



OMP-780
OMP-780-4F-1
(20.75 x 9.96 x 3.92 (mm))



OMP-780
OMP-780-6F-1
(20.75 x 9.96 x 3.92 (mm))



OMP-780
OMP-780-16G-1
(20.75 x 9.96 x 3.92 (mm))



OMP-1230
OMP-1230-6F-1
(32.43 x 9.96 x 3.92 (mm))



PQFN-8x8
SOT1462-1
(8.1 x 8.1 x 2.2 (mm))



PQFN-12x7
PQFN-12x7-36-1
(12.0 x 7.0 x 2.1 (mm))



TO-270
SOT1483-1
(9.65 x 6.1 x 2.03 (mm))



QFN-8x8
QFN-8x8-20-1
(8.0 x 8.0 x 1.05 (mm))

* Not drawn to scale

Committed to your success

At Ampleon, we are passionate about your success. Rest assured that we deliver world class innovation for a broad range of applications. In line with your challenges increasing, we continuously improve and enhance our LDMOS technology and strengthen our footprint in GaN.

During the entire process from design to delivery, you will enjoy outstanding technical support from well trained staff and knowledgeable Field Application Engineers (FAEs) as part of our distribution network. Whether you require load-pull data, application boards, samples, ADS / AWR models or other, you will be accompanied in every step on the way to success.

Our application engineering resources are spread around the globe, with our offices (Nijmegen / The Netherlands, Toulouse / France, Smithfield / USA, Shanghai / China) providing local customer support.

Support

Datasheets, test reports and simulation models are available online on: www.ampleon.com/support/documentation

To make sure your request is processed quickly and directed to the right contact partner at Ampleon, please contact us via: www.ampleon.com/contact

Order samples

To support customers in designing new products, Ampleon supplies samples and demonstration boards.
Samples can be requested via our online e-samples store: www.ampleon.com/samples (please register at first log-in).

For inquiries, please contact your local sales representative listed on: www.ampleon.com/contact

Additional information

- www.ampleon.com/support
- www.ampleon.com/products
- www.ampleon.com/applications



RF design tools

From precise unit conversions to thermal resistance calculations and device lifetime estimates, our tools provide accurate, customizable solutions for your design needs.

www.ampleon.com/support/rf-design-tools

Device naming convention

B L C 10 G F LS P_{1dB} A G V T *Italic = Optional*

M: 50 ohm matched output
T: Internal video decoupling

V: Leads for external decoupling
W: Supply through decoupling leads

Gullwing shaped leads

A: Asymmetric Doherty (PAD); asymmetric integrated Doherty
P: Symmetric Doherty - push-pull configuration

P_{1dB} power level @ the supply voltage of Datasheet; PAD and GaN = P_{3dB}

- - PQFN / LGA / TO270
LS ACC / ACP2
S OMP780 / OMP400
XS ACP3
C OMC

Operation frequency, for single band = highest frequency (22 = 2200 MHz), for multi-band (1822 = 1800 to 2200 MHz)

G: 28-32 V supply voltage
D: Integrated Doherty (28 V)
AD: Advanced integrated Doherty (28 V)
H: 50 V supply voltage

Technology generation

F: Ceramic package
C: Air-cavity plasic (ACP) package
M: MMIC
P: Overmolded plastic (OMP) package

M: Multi-chip device
L: High-frequency power transistor

B: Semiconductor die made of Si
C: Semiconductor die made of GaN

PA discrete (Macro discrete, Macro driver semi discrete + mMIMO [semi] discrete)

C_L n_N G_L f_N S_L $P_{peak\ N}$ [PA feature table]$_L$ X$_{N\ or\ G}$ ***Italic = optional***
N = number, L = letter

- = leave empty when default portfolio item
*# = **DIGIT** for customer specific change (incremental)*
G = gull-wing leads

PA Integration level	PA Configuration (application)	PA Output configuration
Discrete	A Asymmetrical Doherty	V Leads for external decoupling (no internal IPD)
M MMIC in package	P Symmetrical Doherty	T Internal video decoupling (internal IPD)
D Integrated Doherty in package	N N-way Doherty	W Supply through Video-lead (internal IPD)
		L 50 Ohm internal match @ output

P_{peak} @ supply voltage of Datasheet (**use single digit when P_{peak} = <10 W**)

N PQFN / QFN / LGA
P OMP1230 / OMP780 / OMP400 / TO270
C OMC1230 / OMC780
F ACC
W ACP2
X ACP3

Operation frequency, for single-band = highest frequency (22 = 2200 MHz), for multi-band = RF bandwidth (1822 = 1800 to 2200 MHz)

G = 28 - 32 V supply voltage
H = 50 V supply voltage
L = Low supply voltage (TBC)

Product generation

B = Semiconductor die made of Si
C = Semiconductor die made of GaN

PA modules (mMIMO modules + Macro driver modules)

G m M f P P_{peak} *x* *Italic = optional*

*e **x** tra Integration / Functionality Options:*
C = Bias Control + switch (PAM+)
D = in-package Doherty combiner, no 50 Ohm Out-match
T = internal Video decoupling (internal IPD)
...

P_{peak} @ supply voltage of Datasheet

P LGA
N (P)QFN / (P)DFN
C Air Cavity
T Top side Cool

Operation frequency

M: Module = 50 Ohm I/O multi-stage PA (often hybrid active technology)

Product generation

G = mMIMO PA Module
C = Macro Driver PA Module



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