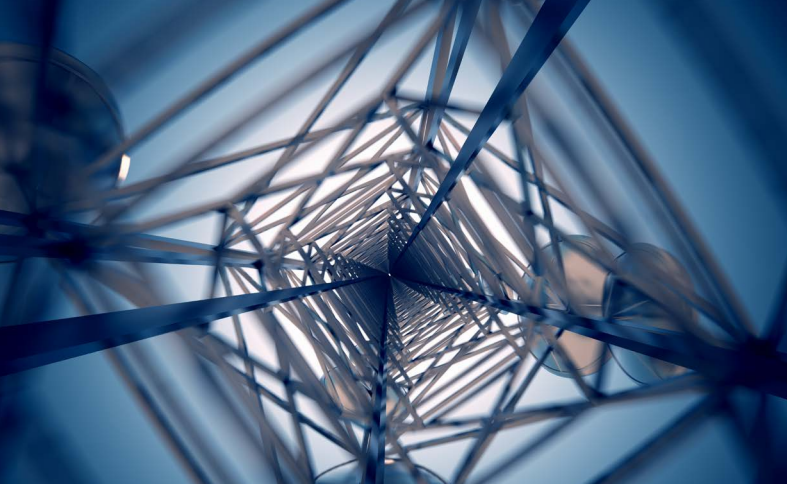




# Product Catalog

RF power solutions for  
**Wireless Infrastructure**



October 2024

# 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](http://www.ampleon.com/mpc)

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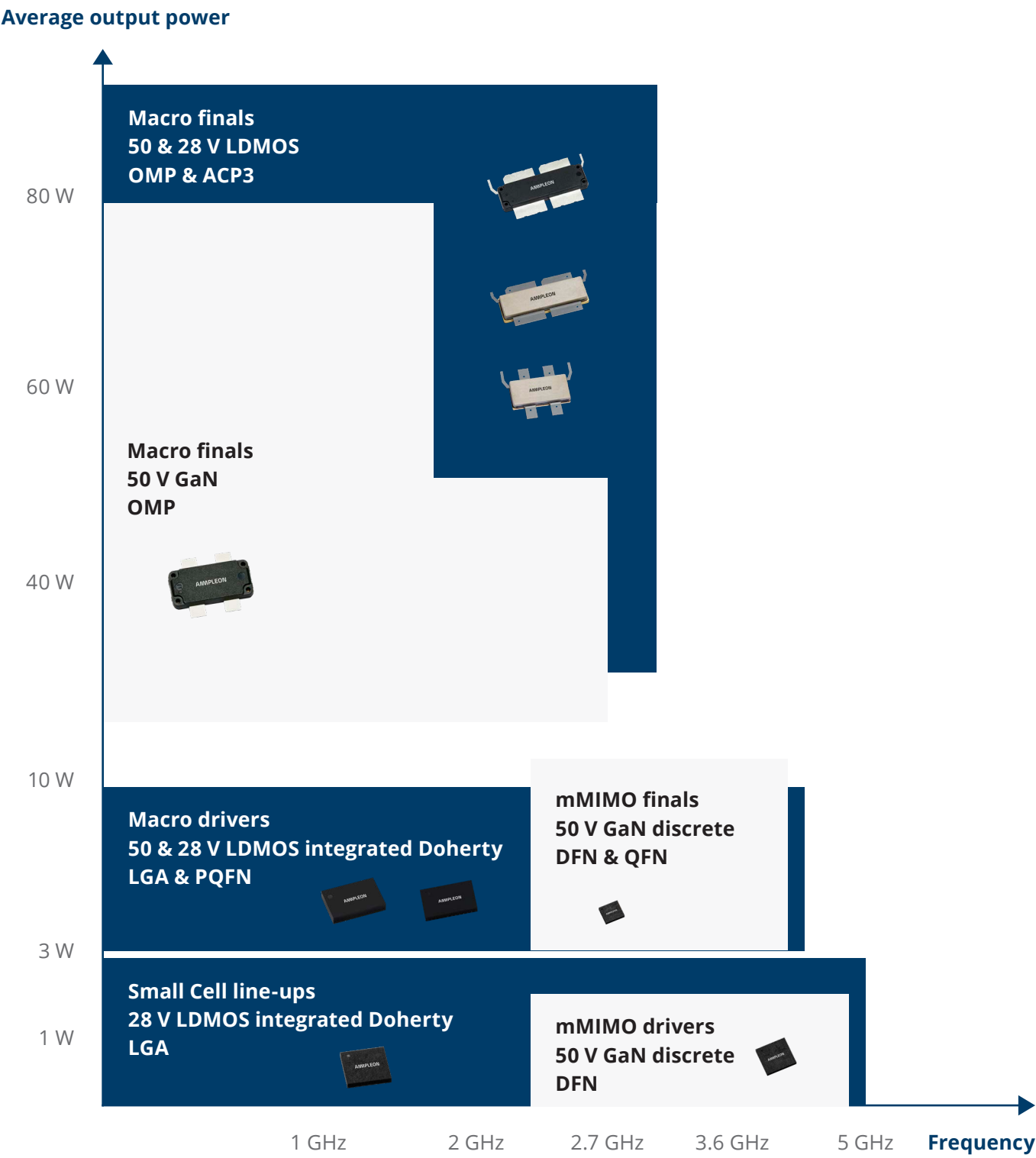
## Device naming convention

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## Package naming convention

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# Recommended PA solutions





# 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](http://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](http://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 name | Package version               | P <sub>PEAK</sub> (W) | V <sub>DS</sub> (V) | $\eta_D$ (%) | G <sub>p</sub> (dB) | Recommended driver              | Status     |
|-----------------|-----------------------------------|--------------|-------------------------------|-----------------------|---------------------|--------------|---------------------|---------------------------------|------------|
| 600-960         | <a href="#">BLP9H10S-500AWT</a>   | OMP-780-6F   | <a href="#">OMP-780-6F-1</a>  | 620                   | 48                  | 52.5         | 17.6                | <a href="#">BLP9H10-30G</a>     | Production |
| 600-960         | <a href="#">BLP9H10S-350A</a>     | OMP-780-4F   | <a href="#">OMP-780-4F-1</a>  | 450                   | 48                  | 53           | 18.6                | <a href="#">BLP9H10-30G</a>     | Production |
| 600-1000        | <a href="#">C4H10P800A</a>        | OMP-780-4F   | <a href="#">OMP-780-4F-1</a>  | 800                   | 50                  | 61.1         | 18.3                | <a href="#">B10H0710N40D</a>    | Production |
| 616-960         | <a href="#">BLC9H10XS-606A</a>    | ACP3-1230-4  | <a href="#">SOT1250-4</a>     | 630                   | 48                  | 55           | 18                  | <a href="#">BLM9H0610S-60PG</a> | Production |
| 617-960         | <a href="#">BLC9H10XS-350A</a>    | ACP3-780-4   | <a href="#">SOT1273-1</a>     | 350                   | 50                  | 56           | 18.1                | <a href="#">BLP9H10-30G</a>     | Production |
| 617-960         | <a href="#">BLC9H10XS-505A</a>    | ACP3-780-4   | <a href="#">SOT1273-1</a>     | 500                   | 48                  | 52           | 18.2                | <a href="#">BLP9H10-30G</a>     | Production |
| 617-960         | <a href="#">BLP9H10S-850AVT</a>   | OMP-1230-6F  | <a href="#">OMP-1230-6F-1</a> | 850                   | 48                  | 52           | 18                  | <a href="#">BLM9H0610S-60PG</a> | Production |
| 700-1000        | <a href="#">C4H10P600A</a>        | OMP-780-4F   | <a href="#">OMP-780-4F-1</a>  | 600                   | 48                  | 62.4         | 18.7                | <a href="#">BLP9H10-30G</a>     | Production |
| 1427-1518       | <a href="#">BLC10G16XS-600AVT</a> | ACP3-1230-6  | <a href="#">SOT1258-4</a>     | 720                   | 32                  | 49           | 17.5                |                                 | Production |
| 1452-1492       | <a href="#">BLC10G15XS-301AVT</a> | ACP3-780-6   | <a href="#">SOT1275-1</a>     | 305                   | 30                  | 50           | 18                  | <a href="#">BLP9G0722-20G</a>   | Production |
| 1800-2200       | <a href="#">C4H22P400A</a>        | OMP-780-4F   | <a href="#">OMP-780-4F-1</a>  | 300                   | 48                  | 60           | 16                  | <a href="#">C4H2327N55P</a>     | Production |
| 1800-2000       | <a href="#">C4H18W500A</a>        | ACP3-780-4   | <a href="#">SOT1273-1</a>     | 500                   | 48                  | 60           | 15                  | <a href="#">C4H2327N55P</a>     | Production |
| 1805-1880       | <a href="#">BLC10G18XS-301AVT</a> | ACP3-780-6   | <a href="#">SOT1275-1</a>     | 300                   | 30                  | 50           | 15.6                | <a href="#">BLP9G0722-20G</a>   | Production |
| 1805-1880       | <a href="#">BLC10G18XS-360AVT</a> | ACP3-1230-6  | <a href="#">SOT1258-4</a>     | 360                   | 28                  | 51           | 15.4                | <a href="#">B11G1822N60D</a>    | Production |
| 1805-1880       | <a href="#">BLC10G18XS-400AVT</a> | ACP3-1230-6  | <a href="#">SOT1258-4</a>     | 400                   | 28                  | 50           | 15.7                | <a href="#">B11G1822N60D</a>    | Production |

Macro finals (continued)

| Frequency (MHz) | Type number       | Package name | Package version | P <sub>PEAK</sub> (W) | V <sub>DS</sub> (V) | η <sub>D</sub> (%) | G <sub>B</sub> (dB) | Recommended driver        | Status     |
|-----------------|-------------------|--------------|-----------------|-----------------------|---------------------|--------------------|---------------------|---------------------------|------------|
| 1805-1880       | BLC10G18XS-551AVT | ACP3-1230-6  | SOT1258-4       | 550                   | 32                  | 51                 | 16.1                | B11G1822N60D              | Production |
| 1805-1880       | BLC10G18XS-602AVT | ACP3-1230-6  | SOT1258-4       | 720                   | 30                  | 49                 | 16                  | B11G1822N60D              | Production |
| 1930-1995       | BLC10G19XS-600AVT | ACP3-1230-6  | SOT1258-4       | 630                   | 30                  | 50                 | 15                  | B11G1822N60D              | Production |
| 1930-1995       | BLC10G19XS-601AVT | ACP3-1230-6  | SOT1258-4       | 750                   | 30                  | 49                 | 15                  | B11G1822N60D              | Production |
| 1930-2000       | BLC10G19XS-551AV  | ACP3-1230-6  | SOT1258-5       | 370                   | 28                  | 51.5               | 15.5                | BLM9D1822-30B             | Production |
| 2110-2170       | BLC10G22XS-301AVT | ACP3-780-6   | SOT1275-1       | 350                   | 30                  | 49                 | 15                  | BLM9D1822-30B             | Production |
| 2110-2170       | BLC10G22XS-551AVT | ACP3-1230-6  | SOT1258-4       | 550                   | 32                  | 51                 | 16                  | B11G1822N60D              | Production |
| 2110-2170       | BLC10G22XS-600AVT | ACP3-1230-6  | SOT1258-4       | 687                   | 32                  | 49                 | 15                  | B11G1822N60D              | Production |
| 2110-2170       | C4H22W500A        | ACP3-780-4   | SOT1273-1       | 500                   | 48                  | 57                 | 15                  | C4H2327N55P               | Production |
| 2110-2170       | BLC10G22XS-603AVT | ACP3-1230-6  | SOT1258-4       | 680                   | 30                  | 48                 | 15.4                | B11G1822N60D              | Production |
| 2110-2180       | BLC10G22XS-570AVT | ACP3-1230-6  | SOT1258-4       | 630                   | 30                  | 48                 | 15.7                | B11G1822N60D              | Production |
| 2110-2200       | BLC10G22XS-400AVT | ACP3-1230-6  | SOT1258-4       | 400                   | 28                  | 47                 | 16.3                | B11G1822N60D              | Production |
| 2110-2200       | BLC10G22XS-401AVT | ACP3-780-6   | SOT1275-1       | 400                   | 28                  | 50                 | 15.5                | BLM9D1822-30B             | Production |
| 2300-2400       | C4H24F550AV       | SOT1249B     | SOT1249B        | 550                   | 48                  | 50.8               | 16.1                | B11G2327N71D              | Production |
| 2300-2690       | C4H27W400AV       | ACP3-780-6   | SOT1275-1       | 400                   | 50                  | 53.7               | 15.4                | C4H2350N05<br>C4H2327N55P | Production |
| 2496-2690       | C4H27F400AV       | SOT1249B     | SOT1249B        | 400                   | 48                  | 56.5               | 15.1                | B11G2327N71D              | Production |
| 2496-2690       | BLC10G27XS-400AVT | ACP3-1230-6  | SOT1258-4       | 420                   | 28                  | 46                 | 14.7                | B11G2327N71D              | Production |
| 2496-2690       | BLC10G27XS-551AVT | ACP3-1230-6  | SOT1258-4       | 550                   | 32                  | 46                 | 13                  | B11G2327N71D              | Production |
| 2620-2690       | C4H27P400A        | OMP-780-4F   | OMP-780-4F-1    | 400                   | 50                  | 58                 | 14                  | B10G2327N55D              | Production |

Macro drivers

| Frequency (MHz) | Type number      | Package name | Package version | P <sub>PEAK</sub> (W) | V <sub>DS</sub> (V) | η <sub>D</sub> (%) | G <sub>B</sub> (dB) | Technology | Status     |
|-----------------|------------------|--------------|-----------------|-----------------------|---------------------|--------------------|---------------------|------------|------------|
| 100-2700        | BLP9G0722-20G    | TO-270-2G    | 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-780-16G  | OMP-780-16G-1   | 60                    | 48                  | 11                 | 35.5                | LDMOS      | Production |
| 617-960         | BLP9H10-30G      | TO-270-2G    | SOT1483-1       | 30                    | 50                  | 14                 | 18.3                | LDMOS      | Production |
| 700-1000        | B10H0710N40D     | LGA-12x8     | LGA-12x8-34-2   | 50                    | 48                  | 25                 | 31                  | LDMOS      | Production |
| 1800-2200       | B11G1822N60D     | PQFN-12x7    | PQFN-12x7-36-1  | 70                    | 28                  | 29                 | 30                  | LDMOS      | Production |
| 1800-2200       | BLM9D1822-30B    | PQFN 8x8     | SOT1462-1       | 39                    | 28                  | 26                 | 30                  | LDMOS      | Production |
| 1800-2200       | BLM10D1822-61ABG | OMP-400-8G   | OMP-400-8G-1    | 60                    | 28                  | 29                 | 28.5                | LDMOS      | Production |
| 2300-2700       | B11G2327N71D     | PQFN 12x7    | PQFN-12x7-36-1  | 85                    | 28                  | 22                 | 30                  | LDMOS      | Production |

## Macro drivers (continued)

| Frequency (MHz) | Type number      | Package name | Package version | P <sub>PEAK</sub> (W) | V <sub>DS</sub> (V) | $\eta_D$ (%) | G <sub>B</sub> (dB) | Technology | Status     |
|-----------------|------------------|--------------|-----------------|-----------------------|---------------------|--------------|---------------------|------------|------------|
| 2300-2700       | BLM9D2327-26B    | PQFN 8x8     | SOT1462-1       | 31.6                  | 28                  | 27           | 29.3                | LDMOS      | Production |
| 2300-2700       | BLM9D2327S-50PBG | OMP-780-16G  | OMP-780-16G-1   | 58                    | 28                  | 25.7         | 29                  | 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 |



# Massive MIMO products

Explore the RF power transistor selection guide at: [www.ampleon.com/products/mobile-broadband](http://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 name | Package version               | P <sub>PEAK</sub> (W) | V <sub>DS</sub> (V) | $\eta_D$ (%) | G <sub>p</sub> (dB) | Technology | Status     |
|-----------------|----------------------------------|--------------|-------------------------------|-----------------------|---------------------|--------------|---------------------|------------|------------|
| 1800-2200       | <a href="#">BLM10D1822-61ABG</a> | OMP-400-8G   | <a href="#">OMP-400-8G-1</a>  | 67                    | 28                  | 43           | 28                  | LDMOS      | Production |
| 2300-2700       | <a href="#">BLM9D2327-26B</a>    | PQFN 8x8     | <a href="#">SOT1462-1</a>     | 32                    | 28                  | 42           | 29                  | LDMOS      | Production |
| 2300-2690       | <a href="#">C4H2327N110A</a>     | DFN          | <a href="#">DFN-7x6.5-6-1</a> | 110                   | 50                  | 57           | 15                  | GaN        | Production |
| 2300-2700       | <a href="#">B10G2327N55D</a>     | PQFN 8x8     | <a href="#">SOT1462-1</a>     | 55                    | 28                  | 43           | 27.5                | LDMOS      | Production |
| 2300-2700       | <a href="#">BLM10D2327-60ABG</a> | OMP-400-8G   | <a href="#">OMP-400-8G-1</a>  | 69                    | 28                  | 43           | 28                  | LDMOS      | Production |
| 2300-5000       | <a href="#">C4H2350N10</a>       | DFN          | <a href="#">DFN-4.5x4-6-1</a> | 10                    | 50                  | 15.5         | 19                  | GaN        | Production |
| 2500-2700       | <a href="#">BLM10D2327-40AB</a>  | PQFN 8x8     | <a href="#">SOT1462-1</a>     | 43                    | 28                  | 45           | 29                  | LDMOS      | Production |
| 3400-3800       | <a href="#">BLM10D3438-35AB</a>  | PQFN 8x8     | <a href="#">SOT1462-1</a>     | 35                    | 28                  | 41           | 33                  | LDMOS      | Production |
| 3400-3800       | <a href="#">B10G3438N55D</a>     | PQFN 8x8     | <a href="#">SOT1462-1</a>     | 55                    | 28                  | 37           | 34                  | LDMOS      | Production |
| 3700-4000       | <a href="#">BLM10D3740-35AB</a>  | PQFN 8x8     | <a href="#">SOT1462-1</a>     | 32                    | 28                  | 32           | 32                  | LDMOS      | Production |
| 3700-4100       | <a href="#">B10G3741N55D</a>     | PQFN 8x8     | <a href="#">SOT1462-1</a>     | 50                    | 28                  | 35           | 33                  | LDMOS      | Production |

## mMIMO finals

| Frequency (MHz) | Type number                  | Package name | Package version               | P <sub>PEAK</sub> (W) | V <sub>DS</sub> (V) | $\eta_D$ (%) | G <sub>p</sub> (dB) | Technology | Status     |
|-----------------|------------------------------|--------------|-------------------------------|-----------------------|---------------------|--------------|---------------------|------------|------------|
| 2300-2690       | <a href="#">C4H2327N55P</a>  | DFN          | <a href="#">DFN-7x6.5-6-1</a> | 50                    | 50                  | 55           | 16.7                | GaN        | Production |
| 2300-2690       | <a href="#">C4H2327N110A</a> | DFN          | <a href="#">DFN-7x6.5-6-1</a> | 110                   | 50                  | 57           | 15                  | GaN        | Production |
| 3400-3800       | <a href="#">C5H3438N110D</a> | QFN-8x8      | <a href="#">QFN-8x8-20-1</a>  | 110                   | 48                  | 55           | 15                  | GaN        | Production |

## mMIMO drivers

| Frequency (MHz) | Type number    | Package name | Package version | P <sub>PEAK</sub> (W) | V <sub>DS</sub> (V) | $\eta_D$ (%) | G <sub>B</sub> (dB) | Technology | Status     |
|-----------------|----------------|--------------|-----------------|-----------------------|---------------------|--------------|---------------------|------------|------------|
| 1800-5000       | C5H2350N10     | DFN          | 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          | DFN-4.5x4-6-1   | 5                     | 48                  | 13           | 18.5                | GaN        | Production |
| 2300-5000       | C4H2350N10     | DFN          | 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 |
| 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](http://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

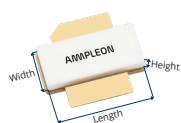
## Small Cell

| Frequency (MHz) | Type number                    | Package name | Package version              | P <sub>PEAK</sub> (W) | V <sub>DS</sub> (V) | $\eta_D$ (%) | G <sub>B</sub> (dB) | Technology | Status     |
|-----------------|--------------------------------|--------------|------------------------------|-----------------------|---------------------|--------------|---------------------|------------|------------|
| 728-821         | <a href="#">BLM9D0708-05AM</a> | LGA 7x7      | <a href="#">LGA-7x7-20-2</a> | 5                     | 28                  | 39.5         | 17.8                | LDMOS      | Production |
| 859-960         | <a href="#">BLM9D0910-05AM</a> | LGA 7x7      | <a href="#">LGA-7x7-20-2</a> | 5                     | 28                  | 38.4         | 18                  | LDMOS      | Production |
| 1805-1880       | <a href="#">BLM9D1819-08AM</a> | LGA 7x7      | <a href="#">LGA-7x7-20-1</a> | 8                     | 28                  | 43.5         | 27.5                | LDMOS      | Production |
| 1805-1880       | <a href="#">B10G1819N10DL</a>  | LGA 7x7      | <a href="#">LGA-7x7-20-2</a> | 10                    | 28                  | 45.2         | 32.2                | LDMOS      | Production |
| 1880-2025       | <a href="#">BLM9D1920-08AM</a> | LGA 7x7      | <a href="#">LGA-7x7-20-1</a> | 8.9                   | 28                  | 42           | 26.8                | LDMOS      | Production |
| 2110-2170       | <a href="#">BLM9D2022-08AM</a> | LGA 7x7      | <a href="#">LGA-7x7-20-1</a> | 8                     | 28                  | 40.7         | 26.6                | LDMOS      | Production |
| 2110-2170       | <a href="#">B10G2022N10DL</a>  | LGA 7x7      | <a href="#">LGA-7x7-20-2</a> | 8.9                   | 26                  | 48.5         | 50.5                | LDMOS      | Production |
| 2300-2400       | <a href="#">BLM9D2324-08AM</a> | LGA 7x7      | <a href="#">LGA-7x7-20-1</a> | 8                     | 28                  | 42.5         | 27                  | LDMOS      | Production |
| 2300-2400       | <a href="#">B10G2324N10DL</a>  | LGA 7x7      | <a href="#">LGA-7x7-20-2</a> | 9.1                   | 28                  | 46.1         | 31.3                | LDMOS      | Production |
| 2496-2700       | <a href="#">BLM9D2527-09AM</a> | LGA 7x7      | <a href="#">LGA-7x7-20-1</a> | 9                     | 28                  | 46.6         | 26.5                | LDMOS      | Production |
| 2500-2700       | <a href="#">B10G2527N10DL</a>  | LGA 7x7      | <a href="#">LGA-7x7-20-2</a> | 9.3                   | 28                  | 45.4         | 30                  | LDMOS      | Production |
| 3300-3650       | <a href="#">BLM9D3336-12AM</a> | LGA 7x7      | <a href="#">LGA-7x7-20-2</a> | 12                    | 28                  | 30           | 31.8                | LDMOS      | Production |
| 3300-3600       | <a href="#">B10G3336N16DL</a>  | LGA 7x7      | <a href="#">LGA-7x7-20-2</a> | 16                    | 28                  | 35           | 35                  | LDMOS      | Production |
| 3300-3650       | <a href="#">BLM9D3336-14AM</a> | LGA 7x7      | <a href="#">LGA-7x7-20-2</a> | 14                    | 28                  | 33.7         | 32.4                | LDMOS      | Production |
| 3400-3800       | <a href="#">BLM9D3538-12AM</a> | LGA 7x7      | <a href="#">LGA-7x7-20-2</a> | 12                    | 28                  | 30.8         | 32                  | LDMOS      | Production |
| 3400-3800       | <a href="#">BLM9D3438-16AM</a> | LGA 7x7      | <a href="#">LGA-7x7-20-2</a> | 16                    | 28                  | 24.3@ 0.8 W  | 32.5                | LDMOS      | Production |
| 3700-4000       | <a href="#">BLM9D3740-16AM</a> | LGA 7x7      | <a href="#">LGA-7x7-20-2</a> | 16                    | 28                  | 31.3@ 1.6 W  | 31.2                | LDMOS      | Production |
| 3800-4200       | <a href="#">BLM9D3842-16AM</a> | LGA 7x7      | <a href="#">LGA-7x7-20-2</a> | 16                    | 28                  | 28.5@ 1.6 W  | 30.2                | LDMOS      | Production |
| 4700-5000       | <a href="#">B10G4750N12DL</a>  | LGA 7x7      | <a href="#">LGA-7x7-20-2</a> | 12                    | 28                  | 32           | 30                  | LDMOS      | Production |

# Package portfolio

Ampleon's package overview is available on [www.ampleon.com/packages](http://www.ampleon.com/packages)

## Air-Cavity Ceramic (ACP) packages\*



Package name  
Package version  
(L x W x H (mm))



SOT1249B  
(20.3 x 9.8 x max 4.65 (mm))

## Air-Cavity Plastic (ACP) packages\*



ACP3-780-4  
SOT1273-1  
(20.6 x 9.8 x max 3.7 (mm))



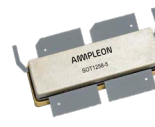
ACP3-780-6  
SOT1275-1  
(20.6 x 9.8 x max 4.0 (mm))



ACP3-1230-4  
SOT1250-4  
(32.2 x 10.1 x max 4.5 (mm))



ACP3-1230-6  
SOT1258-4  
(32.2 x 10.1 x max 4.5 (mm))



ACP3-1230-6  
SOT1258-5  
(32.2 x 10.1 x max 4.5 (mm))

## Overmolded Plastic (OMP) packages\*



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



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



LGA 7x7  
LGA-7x7-20-1  
(7.0 x 7.0 x max 1.0 (mm))



LGA 7x7  
LGA-7x7-20-2  
(7.0 x 7.0 x max. 1.0 (mm))



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



OMP-400-8G  
OMP-400-8G-1  
(10.3 x 10.3 x max 4.0 (mm))



OMP-780-4F  
OMP-780-4F-1  
(20.57 x 9.96 x max 4.0 (mm))



OMP-780-6F  
OMP-780-6F-1  
(20.57 x 9.78 x max 4.0 (mm))



OMP-780-16G  
OMP-780-16G-1  
(20.75 x 9.96 x max 4.0 (mm))



OMP-1230-6F  
OMP-1230-6F-1  
(32.25 x 9.78 x max 4.0 (mm))



PQFN 8x8  
SOT1462-1  
(8.0 x 8.0 x max 2.2 (mm))



PQFN 12x7  
PQFN-12x7-36-1  
(12.0 x 7.0 x max 2.2 (mm))



TO-270-2G  
SOT1483-1  
(10.67 x 6.1 x max 2.0 (mm))



QFN-8x8  
QFN-8x8-20-1  
(8 x 8 x max 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

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# 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](http://www.ampleon.com/support/rf-design-tools)



# Device naming convention

| B  | L | C | 10 | G | F | LS | P <sub>tot</sub> | A   | 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 <sub>1dB</sub> | power level @ the supply voltage of Datasheet; PAD and GaN = P <sub>3dB</sub>                                      |
|    |   |   |    |   |   |    |                  | - - |                  | 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 plastic (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                                                                                      |

[illegible]

# Package naming convention

| OMP - 1230 - 08 F - 1                                                           |                                   |
|---------------------------------------------------------------------------------|-----------------------------------|
|                                                                                 | Outline version number            |
| None:                                                                           | No Leads (DFN / PQFN / MCM / PAM) |
| F:                                                                              | Straight Lead (standard)          |
| G:                                                                              | Gull-Wing Lead (standard)         |
| S:                                                                              | Straight Wide Lead                |
| W:                                                                              | Gull-Wing Wide Lead               |
| Total I/O count, excluding GND / heatsink / exposed die pad, including voltages |                                   |
| 1230:                                                                           | SOT539                            |
| 780:                                                                            | SOT502                            |
| 650:                                                                            | SOT1228                           |
| 400:                                                                            | 10 x 10 mm                        |
| L x B in mm for DFN / PQFN / MCM / PAM / FEM                                    |                                   |
| ACC:                                                                            | Air-Cavity Ceramic Package        |
| ACP:                                                                            | Air-Cavity Plastic Package        |
| DFN:                                                                            | Dual No-lead Package              |
| H-PAM:                                                                          | High Power PAM                    |
| LGA:                                                                            | Land-Grid Array Package           |
| MCM:                                                                            | Multi-Chip Module                 |
| OMP:                                                                            | Overmold Plastic Package          |
| P(QFN):                                                                         | (Power) Quad Flat No-lead Package |
| PAM:                                                                            | Power Amplifier Module            |
| WCP:                                                                            | Wafer level Chip-scale Package    |

