

**Try GaN GH15 MPW**  
**With UMS EUROPEAN LEADER**  
**in RF MMIC products and foundry services**



UMS launches a shared foundry run on its **GH15 GaN** process.

**GH15** is a **0.15µm HEMT GaN-on-SiC** substrate technology for very high power applications up to **40GHz**. With GH15, you will be able to design your own circuits (HPA, LNA, or more complex function). You will be supported by excellent PDK and models:

- highly accurate non-linear scalable models supporting electro-thermal capabilities,
- Stack for EM simulations,
- DRC for layout rules verification.

**Offer conditions and price:**

This offer is dedicated to new design concept evaluation and prototyping. The price is valid for engineering die with no screening and no test inspection.

**Entry price:** 3 200€/mm<sup>2</sup> for a minimum of 4mm<sup>2</sup>

The Multi-Project Wafer launch date is **November 24, 2023**.

<b>INFORMATION</b>	<b>For engineering purpose only</b> Simply provide your GDS file before November 24, 2023			
<b>DELIVERY</b>	16 Engineering chips, from a PCM tested wafer			
<b>CONDITIONING</b>	Gel-Pak® box			
<b>AVAILABLE DIE SIZE (mm)</b>	1	2	3	4
<b>MAX RATIO</b>	1:4			

Die size include 100µm dicing street - No inspection, not test on MMIC

Launching date flexibility is +/- 2 weeks

Minimum order is 4mm<sup>2</sup> - Price is valid until November 24, 2023

Order to be placed before November 10, 2023

Important Notes:

- UMS may cancel the run in case of insufficient number of participants.
- For some countries a specific dedicated export license may be required before delivery.



## How many dies will I receive and how much does it cost?

You will receive 16 engineering chips (untested and without visual inspection) of your circuit in Gel-Pack® box from a **GH15** PCM good wafer. The price is based on your circuit dimensions on the mask tile multiplied by the mm<sup>2</sup> unit price.

For example, if your circuit is 2 x 2 mm<sup>2</sup>, the price is (2 x 2) x 3 200€ = 12 800€

## GH15 MPW tile dimensions (mm)

1	1	2	3	4
1	1	2	3	4
2	2	4	6	8
3	3	6	9	12
4	4	8	12	16

GH15 mask tile with available die size (mm)

## Main characteristics of GH15-11:

Process	GH15
	High Power GaN on SiC
Active Device	HEMT
Power density	4.2W/mm
Gate Length	0.15µm
Idss sat	1.45A/mm
Vbds	>70V
Gain	13dB@30GHz
Vpinch	-3V
Gm max	405mS/mm
VdsDC	Up to 25V
Max freq use	40GHz
MIM Cap.@ 1MHz	175 pF/mm <sup>2</sup>
MIM DHD Cap. @ 1MHz	355pF/mm <sup>2</sup>
TaN Resistor	30 Ohm/sq.
TiWSi Resistor	1000 Ohm/sq.
Wafer thickness	70µm

## How to participate to this shared foundry run?

More information? Ordering your GaN area ? Acquisition of the GaN PDK ?  
Contact UMS marketing & sales department at [mktsales@ums-rf.com](mailto:mktsales@ums-rf.com).

