

# Product Document



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Premstaetten, December 27, 2017

### PCN16-2017 (Second source for wafer fabrication)

Dear valued customers,

In order to reasonably protect the supply of your product "**AS3435 & AS3415**" and to ensure additional flexibility and capacity to further improve responsiveness and ontime delivery to our customers, ams AG is currently qualifying a supplemental source for wafer fabrication.

This will enable us to better support the ever increasing demand in today's dynamic market environment and to have an alternative and ready solution for possible capacity bottlenecks, allocation situations and any other manufacturing issues that may arise and potentially prevent ams AG from meeting our customer's demands on time.

The above mentioned devices, previously qualified at ams Fab B, will also be qualified at TSMC.

TSMC has been a qualified manufacturing partner of ams AG for years.

TSMC is certified in accordance with ISO9001. The technology (mixed signal 0,35um CMOS) is fully compatible to ams' technology.

**Bankverbindungen/  
Bankaccounts**  
UniCredit Bank Austria AG, Graz

**IBAN EUR** AT28 1200 0763 1316 1100  
**BIC** BKAUATWW  
**IBAN USD** AT60 1200 0763 1316 1106

**Firmenbuchgericht** Graz  
**Firmenbuch Nr.** FN 34109k

**DVR** 0420352  
**UID/VAT** ATU 28560205



This change covers only the wafer fabrication of the products.  
Testing and backend services will remain unchanged.

**Process Flow Matrix:**

	<u>Current supply chain</u>	<u>New supply chain</u>
Wafer Fabrication	unchanged - ams fab B (Austria)	ams fab B (Austria) or TSMC
Assembly	unchanged – at qualified assembly partners	unchanged – at qualified assembly partners
Final Testing and Packing	unchanged - ams (Austria) or ams (Philippines)	unchanged - ams – Austria or ams (Philippines)

**Advantages:**

ams' 0,35 CMOS technology is a TSMC licenced technology and matches therefore very well with TSMC's mixed signal CMOS process.

The following product will be affected:

<u>Description</u>	<u>Material ID</u>
AS3435 EQFM QFN36 LF T&RDP	191150023
AS3435 EQFP QFN36 LF T&RDP	191150024
AS3415 EQFM QFN32 LF T&RDP	191150021
AS3415 EQFP QFN32 LF T&RDP	191150022



**Timing of change:**

The supplemental wafer fabrication is fully qualified, the product specific qualification will be finished in Q1 / 2018. Engineering samples will be delivered by February 2018 and material from TSMC fab will be delivered from April 2018 onwards.

**Set of qualification tests:**

ams qualified the wafer fabrication according to JEDEC standards.

Detailed results of the qualification will be available upon request.

On a product level we are going to do a characterization over temperature as well as ESD/LU tests.

If you do have further questions please do not hesitate to contact us.

Please be advised that unless we receive your written refusal concerning this PCN within 30 days, the PCN shall be deemed accepted.

Best regards,

A handwritten signature in black ink, appearing to read 'D. Gleispach'.

Dietmar Gleispach  
ams AG  
Director Operations EAS