

Product Document



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Unterpemstaetten, Jan.12, 2015

PCN31-2014 (Second source for wafer fabrication)

Dear Customer,

In order to reasonably protect the supply of your products

AS3911B-AQFx
AS3415-EQFx
AS3435-EQFx
AS3415-35-ESWB

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 and TS16949 (global quality standard of the automotive industry). The technology (mixed signal 0,35um CMOS) is automotive qualified and 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	ams - Austria	ams – Austria or TSMC
Wafer Probe Testing	unchanged -ams - Austria	unchanged -ams - Austria
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 products will be affected:

- AS3911B-AQFT
- AS3911B-AQFM
- AS3415-EQFP
- AS3415-EQFM
- AS3415-35-ESWB
- AS3435-ESWB (=AS3415-35-ESWB)
- AS3435-EQFP
- AS3435-EQFM



Timing of change:

The supplemental wafer fabrication is fully qualified, the product specific qualification will be finished until February 2015. Material from TSMC fab will be delivered from beginning Q2/2015 onwards.

Set of qualification tests:

ams qualified the wafer fabrication according to JEDEC standards. Detailed results of the qualification are 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 blue ink that reads 'Helmut Pessl'.

Helmut Pessl
ams AG
Director Operations
Business Line Power and Wireless