

ams offers truly scalable transistors in High-Voltage CMOS

Voltage scalable HV transistor devices provide significant area and performance improvements and result in more dies per wafer

Unterpremstaetten, Austria (28 September, 2015) -- The Full Service Foundry division of ams AG (SIX: AMS), a leading provider of high performance analog ICs and sensors, today announced a further expansion of its industry-leading 0.35µm High-Voltage CMOS specialty process platform. The advanced "H35" process provided by the High-Voltage process expert ams now includes a set of truly voltage scalable transistors offering significant area and performance improvements.

The new voltage scalable High-Voltage NMOS and PMOS transistor devices are optimized for various drain-source voltage levels (V_{DS}) from 20V to 100V and provide significant lower on-resistance thus resulting in area savings. Using an optimized 30V NMOS transistor in power management applications instead of a fixed 50V transistor results in an area saving of approx. 50%. A 60V optimized NMOS device results in 22% less area when compared to a standard 120V NMOS transistor. Foundry customers developing complex High-Voltage analog/mixed-signal applications such as large driver and switching ICs instantly benefit from more dies per wafer.

The area optimized devices are ideally suited for a wide range of applications such as MEMS drivers, motor drivers, switches and power management ICs used in automotive, medical and industrial products. ams' Full Service Foundry division is among first foundries worldwide offering true voltage scalable transistors to its foundry customers. Being fully automotive (ISO/TS 16949) and medical (ISO 13485) certified, ams supports highest quality requirements from its customers.

"Being among first foundries worldwide offering true voltage scalable devices, proofs ams' expertise in developing specialty High-Voltage CMOS processes and providing excellent manufacturing services. ams' foundry team is looking forward to teaming up with product developers who are creating advanced High-Voltage products", said Markus Wuchse, general manager of ams' Full Service Foundry division. "Our hitkit, the ams benchmark Process Design Kit as well as our High-Voltage process expertise enable our partners to optimize their HV integrated circuits towards area and on-resistance, which immediately results in more dies per wafer."

This latest High-Voltage process extension is an add-on to the company's "More Than Silicon" portfolio, under which ams provides a package of technology modules, intellectual property, cell libraries, engineering consultancy and services to help customers successfully develop advanced analog and mixed-signal circuit designs based on its specialty technologies.



The complete set of voltage scalable transistors including device layout generator (PCells), simulation models, verification rule decks for Calibre and Assura as well as documentation such as Design Rules and Process Parameters documents can be downloaded by registered users from the company's secure foundry support server at <http://asic.ams.com>.

Learn more about the comprehensive service and technology portfolio of Full Service Foundry at www.ams.com/foundry.

About the Full Service Foundry division of ams

The Full Service Foundry division of ams has successfully positioned itself in the analog/mixed-signal foundry market. Its process technology portfolio includes 0.18 μ m and 0.35 μ m specialty technologies based on ams' analog, mixed-signal, high-voltage and RF processes. With its 'More than Silicon' initiative, ams offers a comprehensive service and technology package that goes beyond industry-standard foundry services. It includes leading-edge technology extensions such as 3D integration using Through Silicon Vias, optical filters, back end process customization, 3D-WLCSP and many more. Superior support during the design phase, high-end tools and experienced engineers, silicon-proven high-performance analog IP blocks, assembly and test services for turnkey solutions complete the Full Service Foundry package.

About ams

ams is a global leader in the design and manufacture of advanced sensor solutions and analog ICs. Our mission is to shape the world with sensor solutions by providing a seamless interface between humans and technology. ams' high-performance analog products drive applications requiring extreme precision, dynamic range, sensitivity, and ultra-low power consumption. Products include sensors, sensor interfaces, power management and wireless ICs for consumer, communications, industrial, medical, and automotive markets.

With headquarters in Austria, ams employs over 1,800 people globally and serves more than 8,000 customers worldwide. ams is listed on the SIX Swiss stock exchange (ticker symbol: AMS). More information about ams can be found at www.ams.com.

Join ams social media channels:

Follow us on twitter <https://twitter.com/amsAnalog> or

Share with <https://www.linkedin.com/company/ams-ag>



for further information

Media Relations

ams AG
Ulrike Anderwald
Marketing Communications
T +43 (0) 3136 500 31200
press@ams.com
www.ams.com

Technical Contact

ams AG
Andreas Wild
Senior Marketing Manager, Full Service Foundry
T +43 3136 500 31246
andreas.wild@ams.com
www.ams.com