

## Press Release

### ams launches world's first digital multispectral sensor-on-chip leveraging breakthrough wafer-level filter technology

# AS7262 and AS7263 six-channel digital multispectral sensor ICs bring the lab to the sample to enable a revolution in consumer and industrial spectral analysis applications

Premstaetten, Austria (17 January, 2017) -- ams AG (SIX: AMS), a leading provider of high performance sensor solutions and analog ICs, today launched the world's first series of cost-effective multispectral sensor-on-chip solutions, opening the way for a new generation of spectral analyzers for consumer and industrial applications.

Offered in a small 4.5 x 4.4mm land grid array package, the ultra-low power AS7262 visible range sensor and AS7263 NIR sensor each provide six calibrated spectral channels. Because of their at-tractive price point, the new multispectral sensors open the door to testing and use in a very wide range of consumer and real-world field applications. Key solution spaces include material and prod-uct authentication, product quality and integrity as well as material content analysis in the near-infra-red (NIR) and visible spectrums.

"In much the same way that intense sensor integration into our smartphones and tablets has created a tidal wave of new mobile applications, the launch of the AS7262 and AS7263, enabling chipscale spectral analysis, heralds a similar revolution that will open the door wide for spectral sensing innovation for both industrial and consumer applications", commented Jean Francois Durix, Marketing Director for Emerging Sensor Systems at ams. "The dramatic reduction in the size and cost of spectral analysis enabled by our new spectral sensing solutions brings the lab to the sample for an incredible variety of applications from food safety and product authentication, to routine testing that can better protect both our health and our environment."

The multispectral sensors employ a new fabrication technique which enables nano-optical interference filters to be deposited directly on the CMOS silicon die with extreme precision. This interference filter technology used for the sensors offers extremely precise and reproduceable filter characteristics which are stable over both time and temperature and are much smaller and more cost-effective than the components typically used in today's spectral analysis instruments.

The AS7262 six-channel visible light sensor with integrated intelligence provides a calibrated digital output over an I<sup>2</sup>C or UART interface. It measures light intensity at six wavelengths in the visible light spectrum: 450nm, 500nm, 550nm, 570nm, 600nm and 650nm. The AS7263 operates in the NIR spectrum detecting 610nm, 680nm, 730nm, 760nm, 810nm and 860nm infrared signatures. Both devices include an electronic shutter with LED drive circuitry, which means that device designers can accurately control the light source and the spectral sensing functions with a single chip.



The small size of the new multispectral sensors combined with their low power consumption enable measurement equipment OEMs to develop new product types that take advantage of these unique attributes. For instance, bulky laboratory-grade analysis equipment can now be replaced by convenient handheld form factors. In factories, samples which today have to be removed from the production line and taken to a laboratory for chemical analysis or quality testing will be tested in-line by new small, robust spectral analyzers based on the multispectral sensors.

The AS7262 and AS7263 are in volume production now.

For more technical information and sample requests, go to <u>www.ams.com/spectral-sensing/AS7262</u> and <u>www.ams.com/spectral-sensing/AS7263</u>.

#### 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 2,200 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 <u>www.ams.com</u>.

Join ams social media channels:

Follow us on twitter <u>https://twitter.com/amsAnalog</u> or Share with https://www.linkedin.com/company/ams-ag

#### for further information Media Relations

ams AG Otilia Ayats-Mas Senior Manager Marketing Communications T +1 469 298 4277 press@ams.com www.ams.com

#### **Technical Contact**

ams AG Tom Griffiths Product Manager T +1 512 330-9124 tom.griffiths@ams.com www.ams.com