

## **Epistar licenced ALLOS' GaN-on-Si epiwafer technology**

*Hsinchu, Taiwan – 11th March 2015 - Epistar licenced GaN-on-Si technology from ALLOS Semiconductors and concluded the first phases of the technology transfer successfully.*

Leading LED maker Epistar Corporation, Taiwan and the engineering and consulting company ALLOS Semiconductors, Germany announced today that Epistar licensed ALLOS' unique gallium nitride on silicon (GaN-on-Si) technology and that the initial phases of the technology transfer project have already been concluded successfully.

The technology transfer project establishes ALLOS' 150 mm and 200 mm GaN-on-Si epiwafer process with excellent homogeneities on Epistar's epitaxy reactors. With full control gained over the GaN-on-Si technology during the project Epistar is then enabled to integrate it with its own leading LED technology. Through the know-how transfer and GaN-on-Si technology training of its engineers Epistar ensures it can pursue further developments independently. Additionally the use of GaN-on-Si epiwafers opens the opportunity to utilise silicon foundries for the processing of the epiwafers.

Epistar has made very good experience with the technology, based on so-called templates, which were supplied to it by AZZURRO Semiconductors in the past. Late last year the technology, know-how and intellectual property of former AZZURRO Semiconductors were acquired by ALLOS. It is now being made available along the existing consulting and customised development services of ALLOS.

Given the opportunity to secure the technology for internal use Epistar decided to move quickly. "Gaining full capability via a technology transfer in a very short period is a time and cost effective way to move ahead." says Dr. M. J. Jou, President of Epistar Corporation, and comments further on the strategy of his company: "GaN-on-Si remains interesting for Epistar as there are advantages in a number of applications and the cost benefits of larger wafer sizes."

"Our combined licensing and technology transfer packages allow customers in both the LED and power semiconductor industry to kick-start their own GaN-on-Si programs successfully. This lets them achieve state-of-the-art results in months instead of trying to catch-up with the pioneers who are years and multi-million dollars of development spending ahead." observes Dr. Atsushi Nishikawa, CTO and Co-founder of ALLOS who sees that for ALLOS' customers the opportunity is to reduce not only cost and time-to-market but also the development and intellectual property risk by building their effort on ALLOS' proven GaN-on-Si platform and know-how.

### **About EPISTAR**

EPISTAR Corp. is the world's largest manufacturer and solutions provider for LED epitaxial wafers and dies. Its product line covers the entire spectrum of LED epi-wafers and dies: an AlGaInP line encompassing red, orange, yellow, and yellow-green light LEDs, an InGaIn line encompassing blue, green, and ultraviolet light LEDs, and Power IR products. Its products are used in markets including general lighting, backlighting for medium- to large-sized LCD screens, automobiles, and LED signage.

EPISTAR leads the industry in its R&D and production scale for AlGaInP LEDs and InGaIn LEDs, and actively deploying its patent portfolio as well as numerous technology platforms. It reached patent cross-licensing agreements with Toyoda Gosei in 2010 and Philips in 2013, and has rapidly expanded production and product application development through acquisitions and strategic alliances.

## About ALLOS Semiconductors

ALLOS is an engineering and consulting company helping clients from the semiconductor industry worldwide to master GaN-on-Si technology and unleash its benefits. Besides its consulting work ALLOS is providing licences to its technology know-how and patents as well as transferring the technology to its customers. In addition ALLOS is delivering customer specific solutions for next generation GaN-on-Si development challenges.

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