Winner of the
productronica
innovation award 2019

Cluster Semiconductor: ASM Amicra – CoS Die-Bonder

Laudation by Prof. Lothar Pfitzner, University of Erlangen

2019 „productronica innovation award“
in the „semiconductors cluster“ to the winner, the company ASM AMICRA Microtechnologies GmbH.

The cluster „Semiconductors“ shows European strenght in this area. Especially equipment companies are one of them.

CoS is a new development of this Regensburg based European Company especially designed to conquer all „Chip on Submount“ applications. CoS equipment is targeting the LASER packages, multiple laser packaged into one housing, for communication market, LiDAR (light detection and ranging) as well as other 3D sensor packages.The machine is capable to perform multi-die bonding of up to +/- 3µm@3s placement accuracy on singulated submounts by using eutectic bonding method, realized either with a ceramic pulse heater or localized non-contact laser heating with a cycle time up to 6s. Beside this bonding methods the CoS can also be equipped with epoxy stamping suitable for solder paste or epoxy. The core is the bonding table equipped with two bonding chucks.

One machine combines two independent bonders. The heart of this machine is the bonding table equipped with two eutectic bonding chucks. While from the chip side the machine uses ASM AMICRA´s over 20 years field approved dynamic alignment method to pick chips and bond with high precision to a singulated submount, the submount side loads new submounts and unloads finished CoS. As mentioned above, in parallel CoS can perform epoxy stamping or preform handling.

We wish the winner company ASM AMICRA Microtechnologies GmbH all success in this high end markets, in Europe and on a worldwide base. We hope this award will support this success.