DTX & GSX Scribe & Break Laser Bar Cleaving

- Fast, accurate and automatic alignment of the individual laser diode bars.
- The ability to program the location of the scribe in relationship to the edge of the bar.
- The ability to program the length of the scribe with a high level of accuracy.
- Delicate touchdown and lift off from the wafer during scribing to prevent damage.

Process Background:
Edge emitting lasers are created using InP and GaAs as the base material. These materials are used for their ability to create an optical quality surface on the edges.

Benefits of Laser Bar Cleaving:

- Scribe and Break is the only method that can be used to propagate a cleave along the crystal plane.
- Breaking along the crystal plane allows for narrow streets and little, or no material loss.
- Short skip scribes are used to induce the cleave propagation, optimizing processing speed and extending the life of the scribe tool.
- Creating an optical quality edge prevents the need for additional polishing.

Edge scribing for cleaving into bars

Skip scribing on laser bars

DTX & GSX Application Note

Although the information and recommendations set forth herein are presented in good faith and believed to be correct, Dynatex International makes no representations as to their completeness or accuracy. Information is supplied upon the condition that the persons receiving will make their own verification and determination as to its suitability for their purposes prior to use. In no event will Dynatex International be responsible for damages of any nature whatsoever resulting from the use of or reliance upon this information. NO REPRESENTATION OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER NATURE ARE MADE HERELINDER WITH RESPECT TO INFORMATION OR PRODUCT TO WHICH INFORMATION REFERS.