

Appendix A – Technical Drawings

Part 1

Current holders (plates), vacuum connection (air block), and tooling for LPD project.

Drawings TD-1175-357_rel_A, TD-1175-358_rel_A, td-1175-208, td-1175-209, and td-1175-359 show the current parts used with an old manual stencil printer for printing on two different workpieces. We would like to utilise such workpiece holders also with the new stencil printer or at least being able to mount workpieces which fit into assembly plate td-1175-208 and interposer plate td-1175-209 on the modified vacuum workpiece clamping system of the new printer.

Drawing td-1175-359 indicates how all parts are currently mounted together in the old manual printer. At present this is accompanied with a stencil that has got two different sets of print pattern side by side. Each pattern is used in two separate printing steps (first for interposer, then for the assembly with interposer). At the moment this allows continuous processing of interposer and assembly workpieces with minimal set-up changes and re-jigging. For the new stencil printer, a solution for holding interposer and assembly workpieces is required. Ideally this shall be separate sets of workpiece holders then used with two new different stencils (with the print pattern in the centre of the stencil).

Part 2

Current and intended set-up for printing on 20mm x 20mm workpieces stacked together with a SiC workpiece holder which can easily transferred with the 20mm x 20mm workpiece to a flip-chip bonder. See schematic in attached file.