

ABSTRACT**APPARATUS, SYSTEM AND METHOD FOR DETERMINING A MATCH****5 CONDITION FOR A PRINTED CIRCUIT BOARD TO A STENCIL**

The invention provides an apparatus (100) for determining the condition of a printed circuit board (10), comprising a stencil database (130) for storing a plurality of stencil data files (21) corresponding to stencils (20) of different dimensions, an image
10 capturing device (110) having an area where the printed circuit board (10) is laid thereon for a surface profile of the printed circuit board (10) to be captured for generating a surface data file (11) of the printed circuit board (10); and a condition determination module (121) that compares data from the surface data file (11) with data from one or more stencil data file (21) as a nominal reference via a matching process
15 to determine the condition of the printed circuit board (10) based on a set of categories. The printed circuit board (10) is sent for further processing (i.e. stencil printing) after being determined to be in a match-successful condition where data from the surface data file (11) falls within a tolerance of the nominal reference.

20 *(Fig. 1)*