

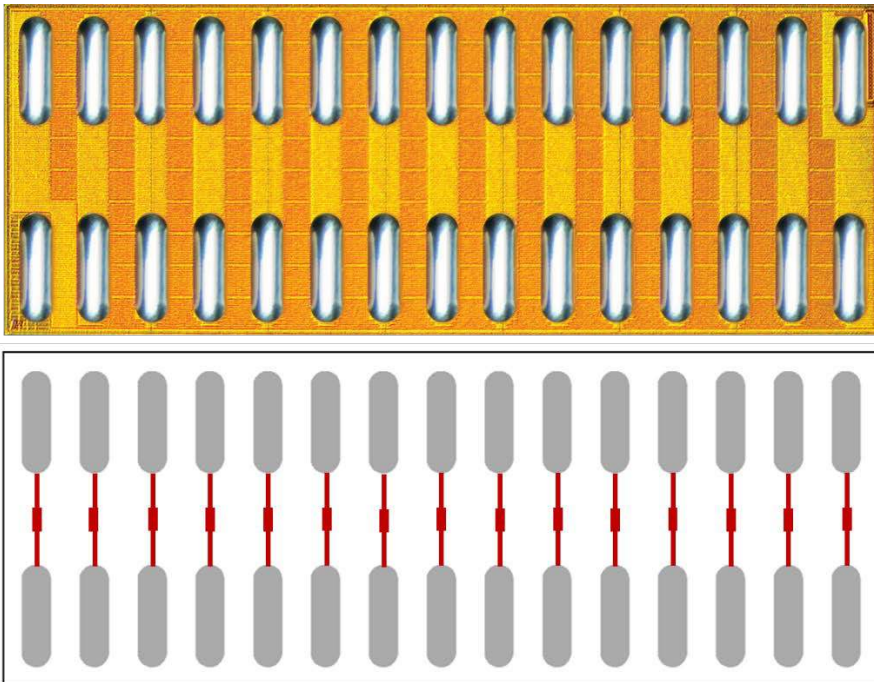
EPCDESIGNTOOL_XL-DC Mechanical Die for Daisy Chain Testing

EPCDESIGNTOOL_XL-DC are sized equivalent to EPC family of devices [EPC2020](#), [EPC2021](#), [EPC2022](#), [EPC2023](#), [EPC2024](#) with die size 6.1 mm x 2.3 mm.

Daisy chain test devices are suitable for a wide variety of process-related testing, such as life cycle testing, drop testing, thermal testing, and optimizing the assembly process.

Daisy-chained packages are wired to provide a continuous path through the package for easy testing as shown in Figure 1 below.

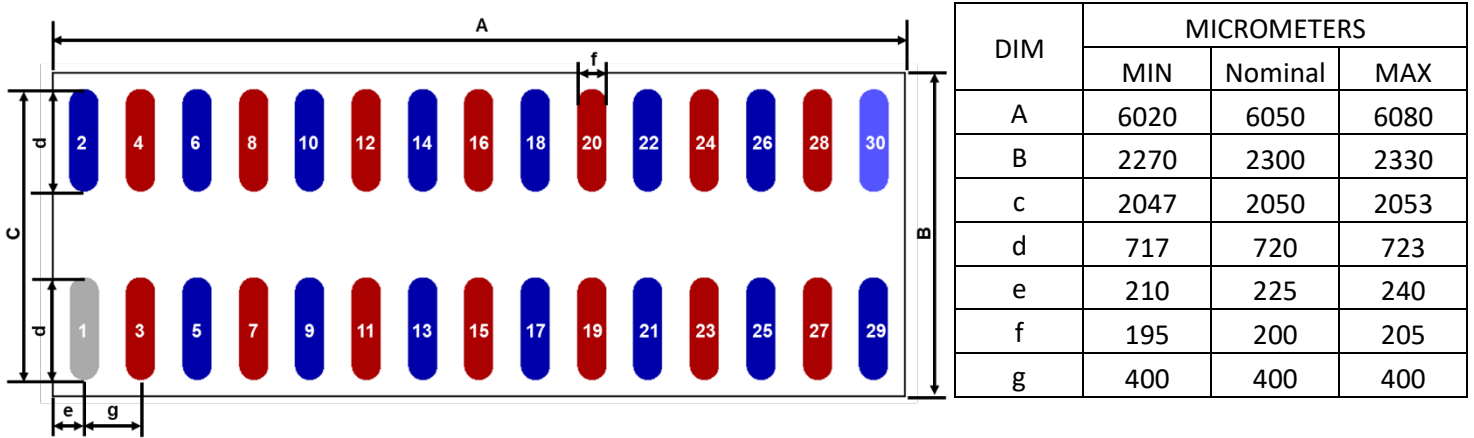
Figure 1: Daisy Chain Connections for EPCDESIGNTOOL_XL-DC



EPCDESIGNTOOL_XL-DC

Mechanical Die for Daisy Chain Testing

Figure 2: Die Outline (Solder Bar View)



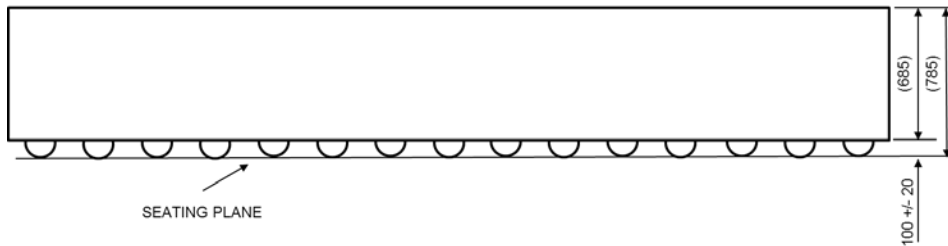
Pads 1 is Gate;

Pads 2, 5, 6, 9, 10, 13, 14, 17, 18, 21, 22, 25, 26, 29 are Source

Pads 3, 4, 7, 8, 11, 12, 15, 16, 19, 20, 23, 24, 27, 28 are Drain

Pad 30 is Substrate

Figure 3: Side View

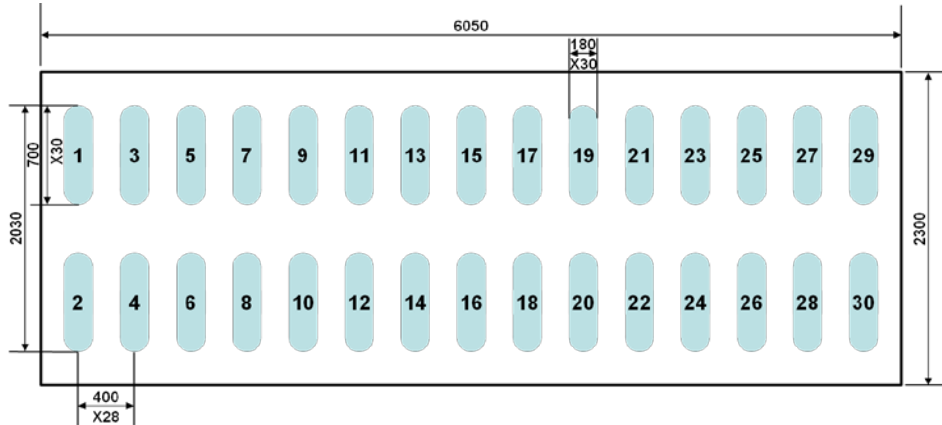


EPCDESIGNTOOL_XL-DC

Mechanical Die for Daisy Chain Testing

Figure 4: Recommended Land Pattern (units in μm)

When a daisy-chained package is assembled on the PCB, a complete circuit is formed, which allows continuity testing. The circuit includes the solder balls, the metal pattern on the die, the bond wires, and the PCB traces.



Land pattern is solder mask defined
Solder mask opening is $180\ \mu\text{m}$
It is recommended to have on-Cu
trace PCB vias

Pads 1 is Gate;

Pads 2, 5, 6, 9, 10, 13, 14, 17, 18, 21, 22, 25, 26, 29 are Source

Pads 3, 4, 7, 8, 11, 12, 15, 16, 19, 20, 23, 24, 27, 28 are Drain

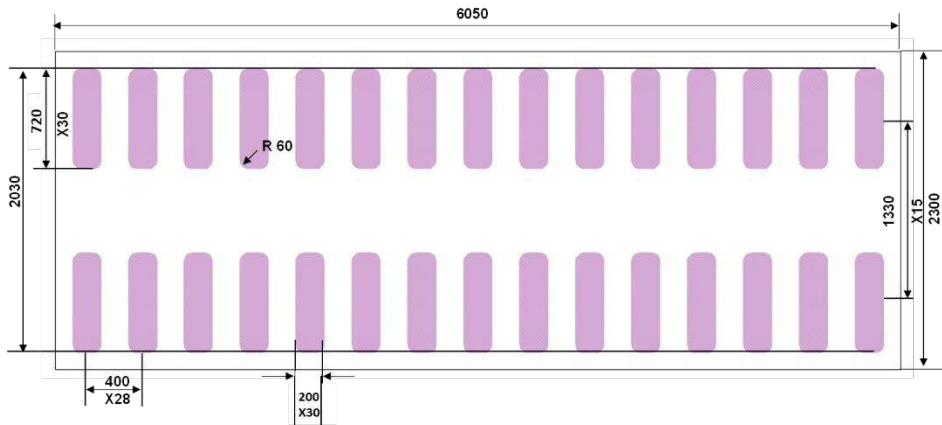
Pad 30 is Substrate

Figure 5: Recommended Stencil Pattern (units in μm)

Intended for use with SAC305 Type 3 solder.

Recommended stencil should be 4mil ($100\ \mu\text{m}$) thick, must be laser cut, openings per drawing.

Additional assembly resources available at epc-co.com/epc/DesignSupport/AssemblyResources.aspx



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EPC Patent Listing: epc-co.com/epc/AboutEPC/Patents.aspx

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