

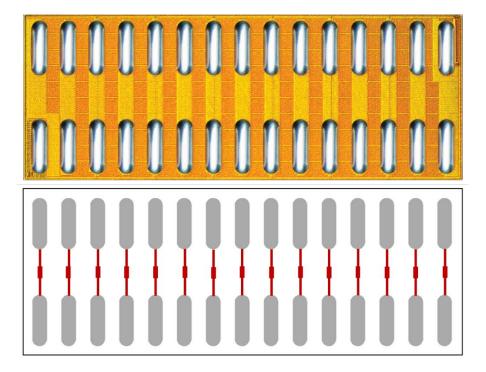
### **EPCDESIGNTOOL\_XL-DC Mechanical Die for Daisy Chain Testing**

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

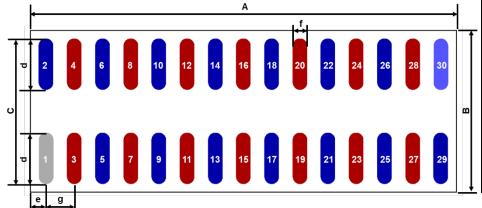


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Figure 2: Die Outline (Solder Bar View)

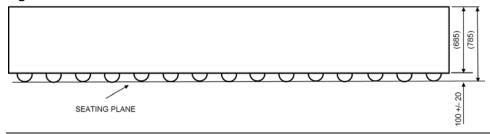


| DIM | MICROMETERS |         |      |
|-----|-------------|---------|------|
|     | MIN         | Nominal | MAX  |
| Α   | 6020        | 6050    | 6080 |
| В   | 2270        | 2300    | 2330 |
| С   | 2047        | 2050    | 2053 |
| d   | 717         | 720     | 723  |
| е   | 210         | 225     | 240  |
| f   | 195         | 200     | 205  |
| g   | 400         | 400     | 400  |

### 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

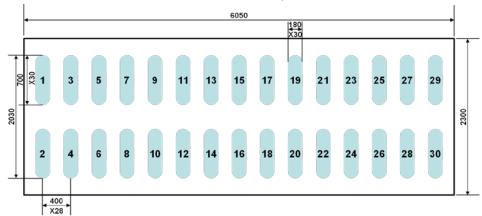




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### Figure 4: Recommended Land Pattern (units in µm)

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 µm It is recommended to have on-Cu trace PCB vias

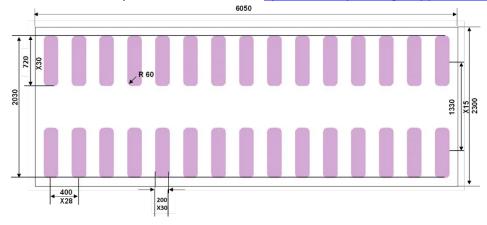
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### Figure 5: Recommended Stencil Pattern (units in μm)

Intended for use with SAC305 Type 3 solder.

Recommended stencil should be 4mil (100  $\mu$ m) thick, must be laser cut, openings per drawing. Additional assembly resources available at epc-co.com/epc/DesignSupport/ AssemblyBasics.aspx



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