EPCDESIGNTOOL_XL-EM
Mechanical Die for Electromigration Testing

EPCDESIGNTOOL_XL-EM are sized equivalent to EPC family of devices EPC2020, EPC2021, EPC2022, EPC2023, EPC2024 with die size 6.1 mm x 2.3 mm.

These devices have internal metal layers shorted for electromigration reliability testing.

Figure 1: Die Photo for EPCDESIGNTOOL_XL-EM

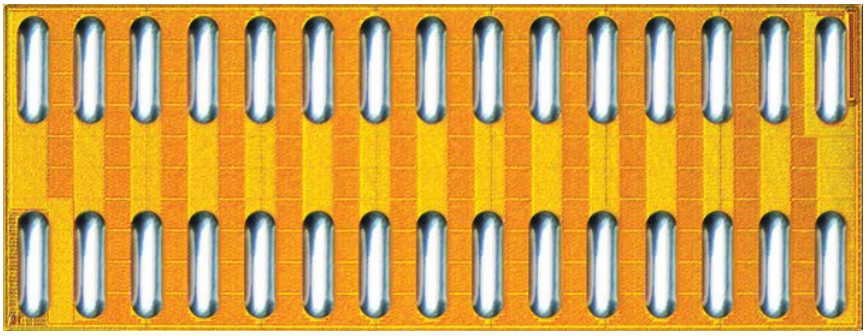
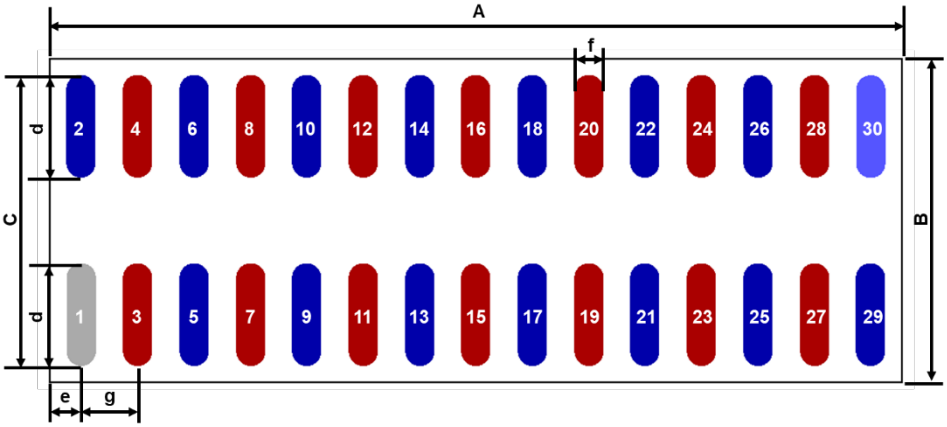


Figure 2: Die Outline (Solder Bar View)



DIM	MICROMETERS		
	MIN	Nominal	MAX
A	6020	6050	6080
B	2270	2300	2330
c	2047	2050	2053
d	717	720	723
e	210	225	240
f	195	200	205
g	400	400	400

Pad 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
NOTE: Drain and Source are internally shorted at Metal 1 to create a metal resistor

Figure 3: Side View

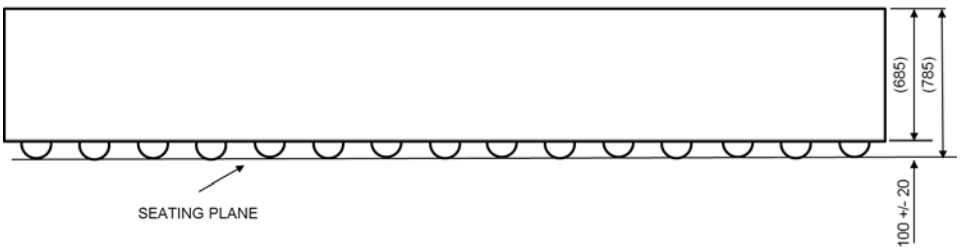
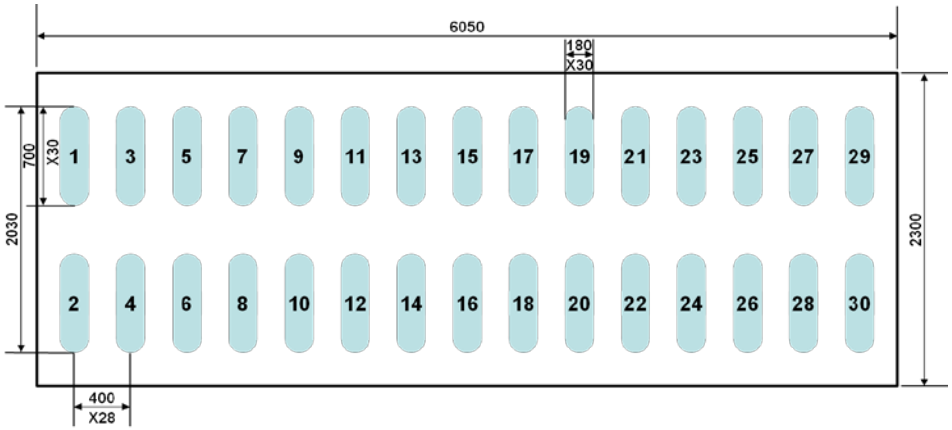


Figure 4: Recommended Land Pattern (units in µm)



Land pattern is solder mask defined
Solder mask opening is 180 µm
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
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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 µm) thick, must be laser cut, openings per drawing.

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