Fine Pitch Full Flip Chip COB LED Display

Chip on board (COB) technology is a method of directly mounting red, green, and blue chips onto a printed circuit board (PCB). Packaging the bare chips directly onto the PCB enables a much higher chip density while creating a flat uniform LED surface. The combination of three-color values allows the chips to achieve a higher color gamut and replicate true-to-life imagery.

Flip-chip COB technology involves mounting LED chips upside down on the substrate, allowing direct contact between the chip's contacts and the substrate. This design eliminates the need for wire bonding, resulting in a more streamlined and efficient design.

Advantages of Flip-Chip COB including:

- Superior Thermal Management: Direct contact with the substrate enhances heat dissipation, allowing the display to run cooler and more efficiently.
- Higher Packing Density: Eliminating wire bonding enables closer placement of chips, significantly improving brightness, resolution, and overall display quality.
- Increased Reliability: Fewer failure points due to the absence of wire bonds result in displays that are more robust and durable.

Common Cathode Technology

Thanks to the common cathode technology, Mega 5 Fine pitch COB LED displays generate less heat with consequently only consume maximum 320W (*pitch 0.9mm at 1200 nits) per sq. meter which is almost 30% less power consumption compared with traditional led display.

Ultra slim and light cabinet

The cabinet is made by Die-cast aluminum in golden 16:9 ratio (600x337.5), thanks to the Ultra-thin and Ultra-light design, the cabinet is just 32mm thin and 5kg weight.

16:9

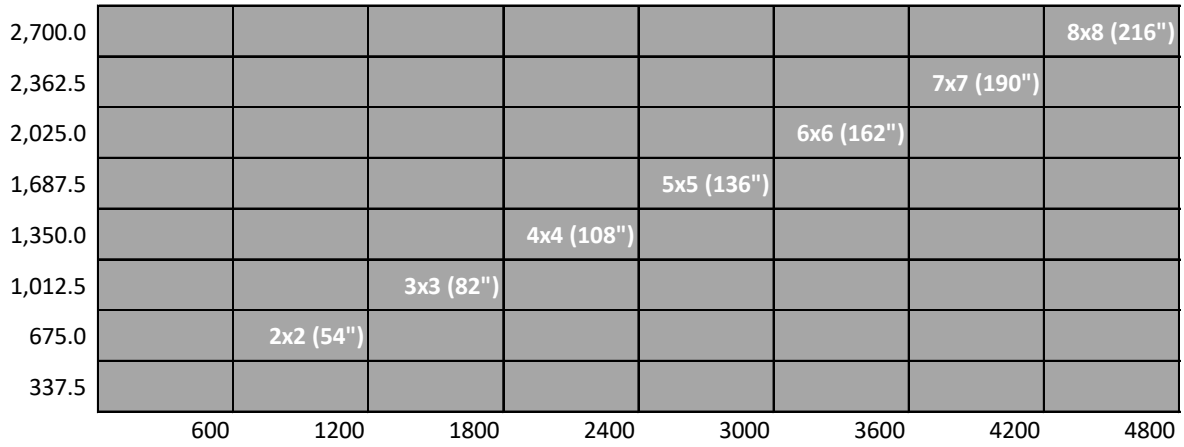
Adopt International golden ratio 16:9

Prefect splicing combination,

Create multi-application suitable for all application

2K / 4K

(High: mm)



	1x1	2x2	3x3	4x4	5x5	6x6	7x7	8x8
0.93	640 x 360	1280 x 720	1920 x 1080	2560 x 1440	3200 x 1800	3840 x 2160	4480 x 2520	5120 x 2880
1.25	480 x 720	960 x 540	1440 x 810	1920 x 1080	2400 x 1350	2880 x 1620	3360 x 1620	3840 x 2160
1.56	384 x 216	768 x 432	1152 x 648	1536 X 864	1920 x 1080	2304 x 1296	2688 x 1512	3072 x 1728
1.87	320 x 180	640 x 360	960 x 540	1280 X 720	1600 x 900	1920 x 1080	2240 x 1260	2560 x 1440
2.5	240 x 134	480 x 268	720 x 402	960 x 536	1200 x 670	1440 x 804	1680 x 938	1920 x 1072

Product specification:

Pitch	P0.93	P1.25	P1.56	P1.875
Module size	150x168.75mm			150x337.5
Module resolution	160x180	120x135	96x108	80x180
Cabinet diamension	600(W)x337.5(H)x32(D)mm			
Cabinet resolution	640x360	480x270	384x216	320x180
Cabinet material	Aluminium alloy	Die cast aluminium		
Cabinet weight	4.5kg			
No. of modules in cabinet	8			4
Grayscale	13-22 bit			
color temperature	6500 ~ 9000K (adjustable)			
Scanning mode	1/36	1/45	1/54	1/45
Brightness	1500 nits/m^2	2000 nits/m^2	1500 nits/m^2	
Contrast	>20000 : 1			
Refresh rate	≥3840 HZ			
Viewing angle	160° Horizontal / 160° Vertical			
Workng environment	Temperature 10°C ~ 40°C / Humidness 15% ~ 90% RH			
Power Supply	AC 100 ~ 240V (50/60HZ)			
Max power consumption (@1200 nits)	320W / m^2	280W / m^2	250W / m^2	250W / m^2
Average power consumption (@1200 nits)	128W / m^2	112W / m^2	112W / m^2	112W / m^2
Certificate	CCC/ CE / ROHS			

Product specification and appearance are subject to change from manufacturer from time to time without prior notice.