Fine Pitch Full Flip Chip COB LED Display

Chip-on-Board (COB) technology involves directly mounting red, green, and blue LED chips onto a printed circuit board (PCB). By integrating bare chips onto the PCB surface, it achieves significantly higher chip density and forms a smooth, uniform LED display. This tri-color configuration enables an expanded color gamut, delivering vivid and lifelike visual reproduction.

Flip-chip COB technology mounts LED chips inverted directly onto the substrate, enabling direct contact between the chip terminals and the board surface. This eliminates wire bonding, simplifying the structure and enhancing design efficiency.

Key Advantages of Flip-Chip COB Technology:

- 🌡 **Efficient Heat Dissipation**: Direct chip-to-substrate contact improves thermal conduction, keeping displays cooler and boosting energy efficiency.
- 🔍 **Optimized Chip Density**: Without wire bonding, chips can be tightly packed — resulting in higher brightness, enhanced resolution, and superior image quality.
- 🔧 **Exceptional Durability**: Fewer components mean fewer potential failure points, delivering greater reliability and longer product lifespan.

Common Cathode Technology

Powered by common cathode technology, our Fine Pitch Full Flip-Chip COB LED display operates with significantly reduced heat generation—consuming a maximum of just 320W per square meter (at 0.9mm pitch and 1200 nits brightness). That’s nearly 30% less power compared to traditional LED displays.

Ultra slim and light cabinet

Crafted from die-cast aluminum and designed in a premium 16:9 golden ratio (600 × 337.5 mm), the cabinet features an ultra-thin profile of just 32mm and weighs only 4.5kg—delivering a sleek and lightweight solution."

Stay away from harmful blue light

Our Fine Pitch Full Flip-Chip COB LED display has been rated as 'Exempt Group' under the EN62471 photobiological safety standard, indicating it poses no photobiological hazard. This ensures users are protected from harmful blue light exposure, promoting a comfortable and safe environment for both work and learning."

16:9

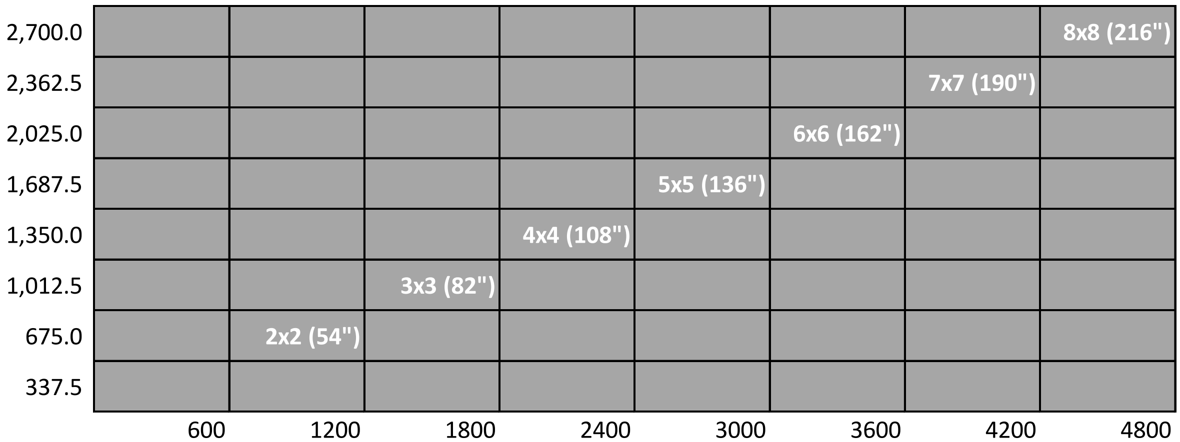
Adopt International golden ratio 16:9

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/ EN62471			

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