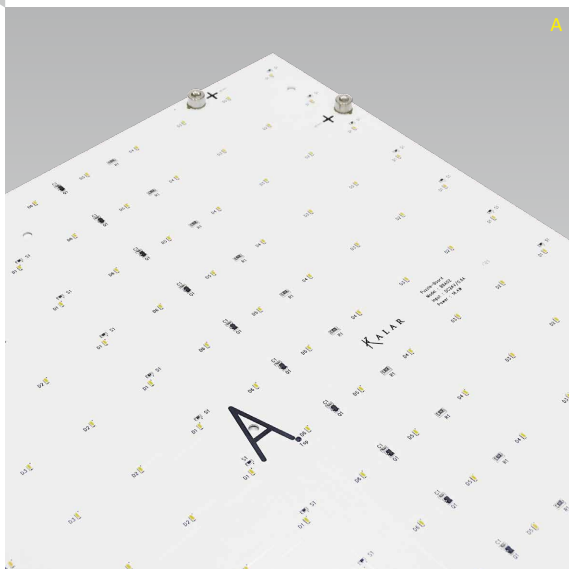
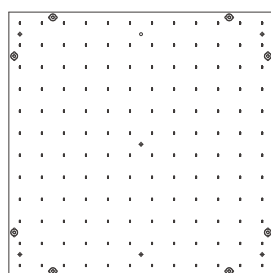
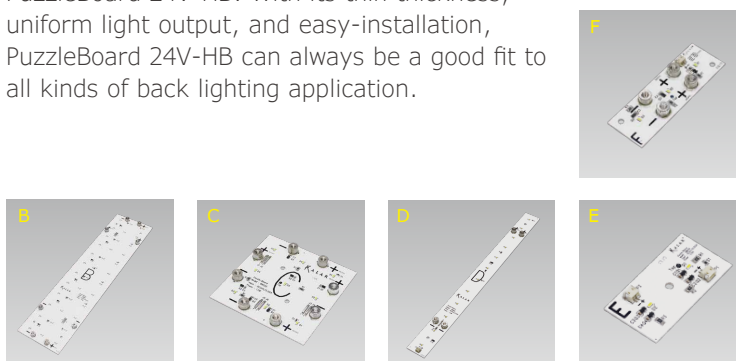


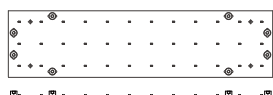
# PUZZLEBOARD 24V-HB



PuzzleBoard 24V-HB is a very thin LED light board series which is designed for back-lighting / advertising-lighting application. With its 6 different panel sizes, all kinds of lighting area in different size can be presented by using different panel of PuzzleBoard 24V-HB. With its thin thickness, uniform light output, and easy-installation, PuzzleBoard 24V-HB can always be a good fit to all kinds of back lighting application.



Type A: 360 x 360 x 7



Type B: 360 x 90 x 7



Type C: 90 x 90 x 7



Type D: 360 x 30 x 7

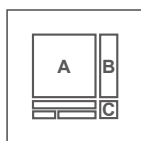


Type E: 60 x 30 x 7



Type F: 90 x 30 x 7

Unit: mm



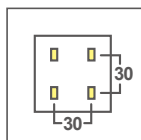
### Six Sizes for Easy Combination

PuzzleBoard 24V-HB Series has 6 types of PCB. With these different board sizes, PuzzleBoard 24V-HB Series will be a good fit for all kinds of lighting area.



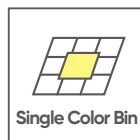
### High Quality MCPCB is Applied

High-quality aluminum PCB is used for good heat dissipation and long life-time.



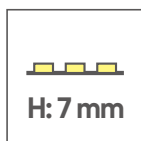
### LED Pitch is Only 30mm

With small LED pitch, PuzzleBoard 24V-HB Series is a good fit for back light application with short light-mixing distance.



### Single Color Bin

By using single LED color bin, PuzzleBoard 24V-HB Series always provides constant color temperature.



### Thin Thickness

The total thickness of PuzzleBoard 24V-HB Series is only 7mm and can be fit into most kinds of thin spaces.



### PWM Singal Compitable

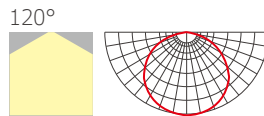
With special circuit design, PuzzleBoard 24V-HB Series can be dimming by PWM signal without flickering.

## Specification

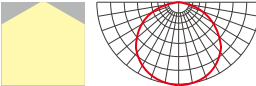
**PB85810**

Power per Panel	Type A: DC24V, 0.6A, 14.4W / Type B: DC24V, 0.15A, 3.6W Type C: DC24V, 0.05A, 1.2W / Type D: DC24V, 0.05A, 1.2W Type E: DC24V, 0.025A, 0.6W / Type F: DC24V, 0.025A, 0.6W
LEDs per Panel	Type A: 144pcs / Type B: 36pcs Type C: 9pcs / Type D: 12pcs Type E: 2pcs / Type F: 3pcs
LED Type	3014 SMT LED
Pitch between LEDs	30mm
Light Output Angle	120°
Hot Lumen Output	Type A : >1500lm / Type B : >370lm Type C : >90lm / Type D : >120lm Type E : >20lm / Type F : >30lm (Tested at 6000K)
Color Temperature	Single color bin between 2700K - 6500K
CRI	>90
Operation Temperature	-20°C~40°C
Storage Temperature	-20°C~60°C

## Optical Information



120°



## Order Code

PB85810 - C \_ \_ - S \_

**C** To Define Color Temperature

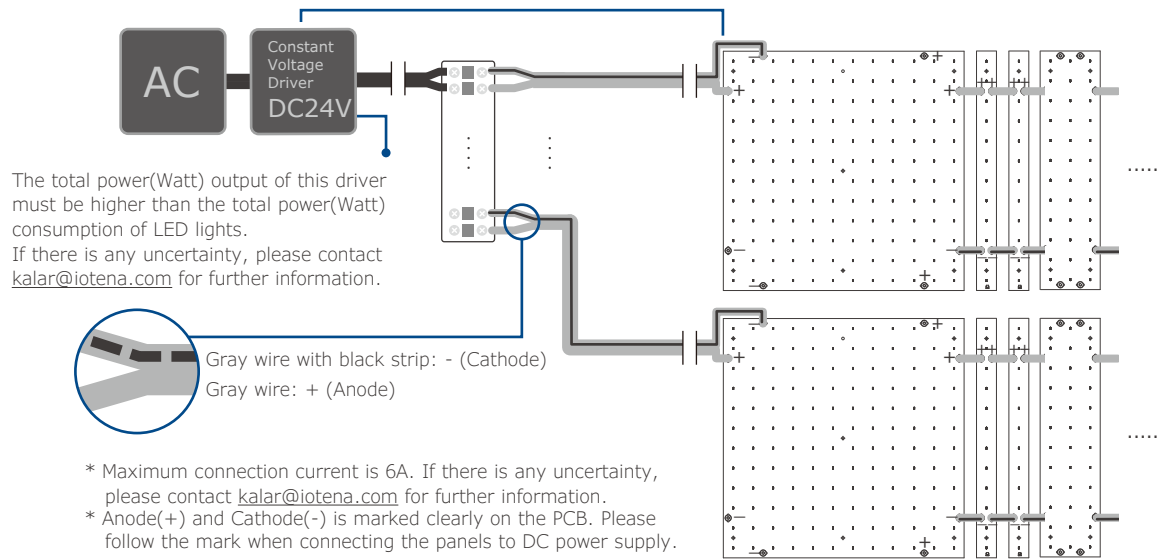
- C 2 7 = 2700K
- C 3 0 = 3000K
- C 3 5 = 3500K
- C 4 0 = 4000K
- C 4 5 = 4500K
- C 5 0 = 5000K
- C 5 7 = 5700K
- C 6 5 = 6500K

**S** To Define PCB Size

- S A = Type A (360 x 360mm)
- S B = Type B (360 x 90mm)
- S C = Type C (90 x 90mm)
- S D = Type D (360 x 30mm)
- S E = Type E (60 x 30mm)
- S F = Type F (90 x 30mm)

## Configuration

Distance between lighting fixtures and DC power source is a critical issue, please control the distance and wiring system carefully to avoid voltage drop. Voltage drop may cause product failure and void the warranty.

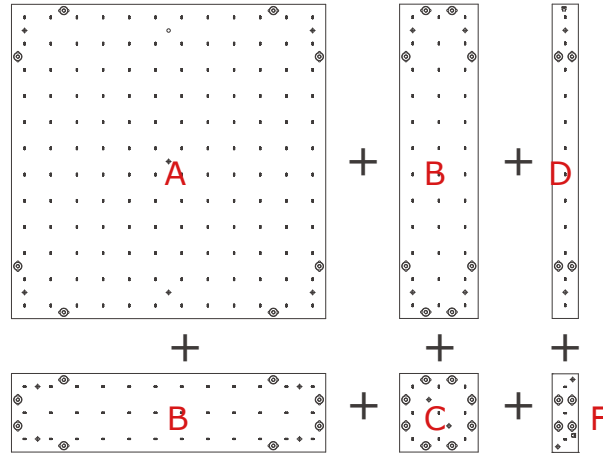


## Parameters

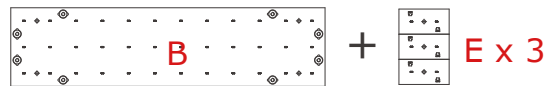
Panel Type	Panel Size	Input Current	Total Power (W)
A	360 x 360mm	0.6A	14.4W
B	360 x 90mm	0.15A	3.6W
C	90 x 90mm	0.05A	1.2W
D	360 x 30mm	0.05A	1.2W
E	60 x 30mm	0.025A	0.6W
F	90 x 30mm	0.025A	0.6W

## Examples of Different Size Combination

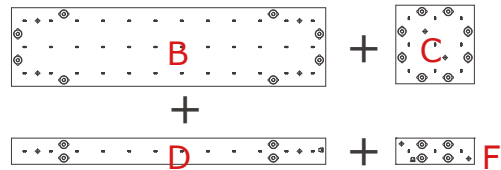
**I**



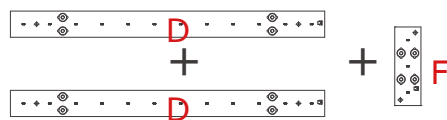
**II**



**III**



**IV**



- \* There are many different combinations to fill up the lighting area.
- \* Maximum connection current is 6A.
- \* If there is any uncertainty, please contact [kalar@iotena.com](mailto:kalar@iotena.com) for further information.