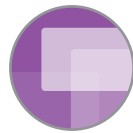
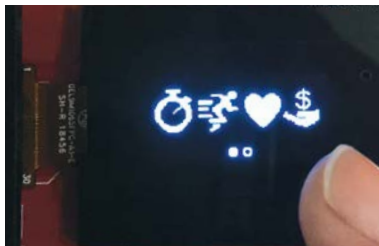


# PMOLED TDDI IC

## World's 1<sup>st</sup> PMOLED TDDI IC to Transform "Display" Panels into "Touch + Display" Panels



### A Ground-breaking Innovation for Today and Tomorrow

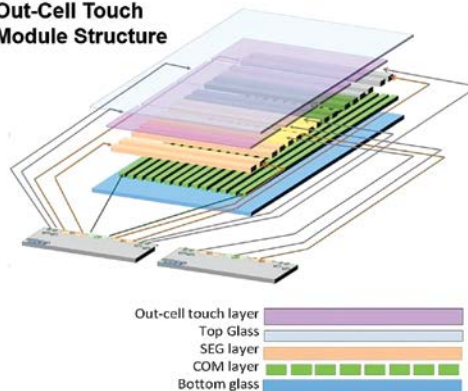
Solomon Systech Limited has been a pioneer and forerunner of both PMOLED and touch technologies. We developed the world's first single chip PMOLED display driver IC in 2001, and has been a global market leader of PMOLED display driver IC.

Aiming to revolutionize PMOLED display technology, both to further enhance end user experience, and extend its applications, Solomon Systech has developed the "World's 1<sup>st</sup> PMOLED Touch and Display Driver Integration (TDDI) IC SSD7317" which integrates touch and display microelectronics into a single chip for use on PMOLED panels.

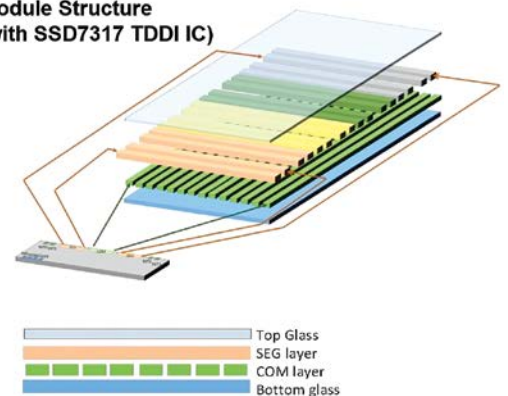
### From Out-Cell PMOLED display panel to In-Cell "Touch + Display" PMOLED panel

The SSD7317 transforms the traditional out-cell PMOLED display panel into in-cell "touch + display" panel. It has adopted a proprietary time multiplexing approach for display driving and in-cell touch detection, thereby enables in-cell touch detection on traditional PMOLED display modules with no modifications needed on the existing display module structure.

PMOLED Out-Cell Touch Module Structure



PMOLED In-Cell Touch Module Structure (with SSD7317 TDDI IC)



**Applications:** Wearables, Smart Home Appliances, IoT Devices, Smart Healthcare Devices, etc.

### Key Competitive Advantages

Compared with traditional out-cell touch approach, the key competitive advantages of SSD7317's in-cell touch technology includes:

- Enables better display quality given higher light transmittance
- Enhances touch performance with the proprietary time multiplexing approach reducing display and touch crosstalk
- Lowers the total module costs by reducing the total number of components
- Improves yield rate of final product assembly
- Shortens development cycle
- Enables ultra-slim form factor

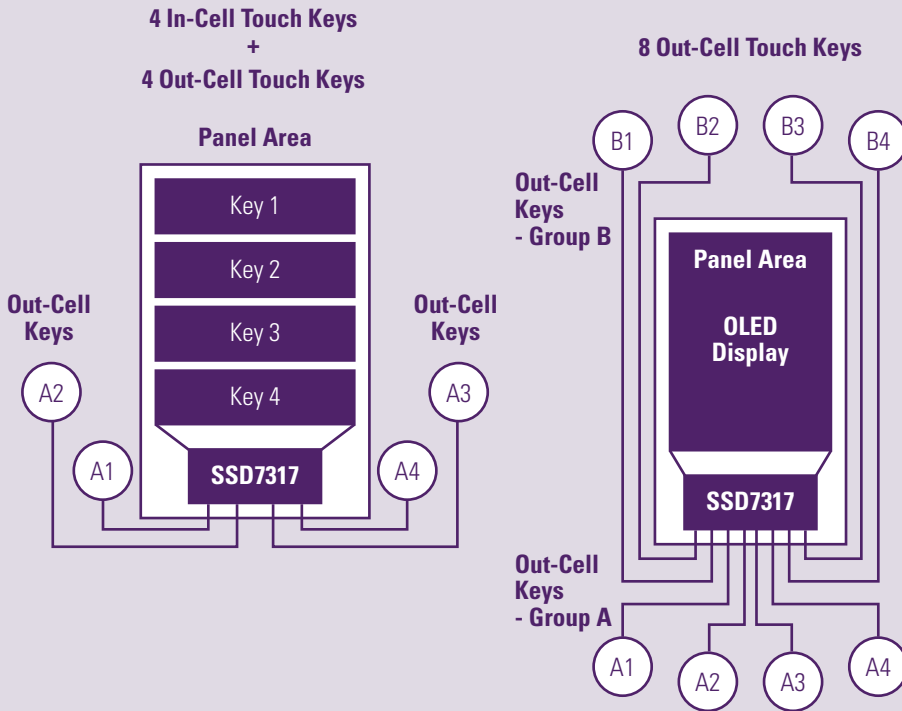


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# PMOLED TDDI IC

## Application Diagram



## Touch Gestures Supported

### Single-tap



### Double-tap



### Long-tap



### Up/Down-slide



### Left/Right-slide



## Key Features

### Resolution

- 128 x 96 Mono Color

### Number of Touch Key Supported

- 1 - 4 In-Cell touch keys
- 8 Out-Cell touch keys

### Gestures Supported

- Single tap
- Double tap
- Long tap
- Slide gestures (up/down and left/right)

### Segment Maximum Source Current

- 600uA

### OLED Display High Voltage Supply (VCC)

- 8.0V - 18.0V

### Touch Driving Voltage Supply (VCI)

- 3.0V - 3.5V

### Communication Interface

- 8-bit Parallel Interface (display only)
- SPI (display/touch)
- I<sup>2</sup>C (display/touch)

## Solomon Systech Limited

Solomon Systech Limited is a leading semiconductor company providing IC products and system solutions that enable a wide range of display and touch applications for smartphones, tablets, TVs/monitors, notebooks and other smart devices, including wearables, healthcare devices, smart home devices, as well as industrial appliances, etc. Solomon Systech (International) Limited's shares are listed on the main board of the Stock Exchange of Hong Kong Limited (stock code: 2878). More information about the Group, its products and services may be obtained at <http://www.solomon-systech.com>.



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