

FCL Component Touch Panels

FID-1540 series

FCL Components Projected Capacitive Touch Panels

Overview

FCL Components' projected capacitive touch panels feature a film-film sensor with a top cover glass structure. Five standard panels are available ranging from 12.1 to 18.5 inches in size, available small minimum order quantity for prototypes and does not require NRE.

FCL Components can provide professional factory tuning service for customers' PCAP integrated systems. FCL Components's tuning service minimizes the needs of customers' interface with controller IC suppliers, which greatly expedites the development lead-time.

The series is suitable for a variety of applications, such as Kiosk terminals, POS terminals, factory automation, HMI panels, medical equipment, amusement park terminals, etc.

Semi-Custom Design Support

Based on the standard series, FCL Components can design semi-custom products to address customers specific requirements. This can be done quickly and at a minimum cost for each option:

- Cover glass: Outer shape size, thickness, material, surface treatment
- Top decor: Color, logo, other graphics
- FPC: Length, shape, COF (Chip-on-Flex) style

Full Custom Design Support

In addition to the semi-custom design, FCL Components also provides full custom design service that includes designing any size of the sensor and mated cover glass, and FPC cable shapes, size, and direction.

RoHS compliant



Projected capacitive touch panel



Control board

Features

- Glass-Film-Film structure
- Chip-on-Board (COB) Flex Tail
- Custom Cover Glass option
- Strengthend Glass option
- Graphic Border / Logo option
- Custom Designs products
- RoHS compliant

■ Specifications

Item	Specifications					
Mechanical	Input method	Finger (up to 10 simultaneous inputs)				
	Panel sizes (inches)	12.1	12.1 Wide	15	15.6 Wide	18.5 Wide
	Structure	Glass-film-film				
	IC assembly structure	COB				
	Cover glass material	Soda-lime (strengthened 6 faces), surface hardness $\geq 6H$				
	Cover glass color	Solid black				
	Cover glass thickness	1.1 mm	1.1 mm	1.8mm	1.8mm	1.8mm
Optical	Transparency	90% (typical)				
	Haze	0.5 % (typical)				
Electrical	Position accuracy	Max. ± 2 mm				
Environmental	Operation temperature /humidity	-20° to +70°C / 20 to 90% RH (max wet bulb temperature 38°C no condensation)				
	Storage temperature /humidity	-25° to +75°C / 10 to 90% RH (max wet bulb temperature 38°C no condensation)				

■ Touch Panel Part Numbers

Size	Part number	Cover glass (mm)	Transparent area (mm)*	FPC position (center)	FPC Length	Min. order quantity
12.1	FID-1540-101-H12	287.0 x 220.9	247.0 x 185.5	Short side	65.0	20
12.1 (W)	FID-1540-121-H12	303.0 x 205.1	262.1 x 164.2	Long side	64.3	30
15.0	FID-1540-061-H15	346.5 x 275.0	305.1 x 229.1**	Short side	70.0	15
15.6 (W)	FID-1540-081-H15	390.4 x 233.0	346.6 x 195.4	Short side	72.1	15
18.6 (W)	FID-1540-141-H18	457.1 x 266.4	410.9 x 231.4	Short side	71.8	15

Notes: *: Transparent area size and sensor active area is the same, except FID-1540-061-H15.

** : Sensor active area size is 308.1 x 232.1 (mm)

■ Control Board Basic Specifications

Item	Specifications/ Conditions
IC supplier	Weida Hi-Tech Co., Ltd
Interface	USB 2.0 (full speed)
Power supply voltage	5V DC (typical)
Power consumption (operation)	68 μ A (typical at 10 points input operation)
Power consumption (suspended)	700 μ A (typical)
Number of simultaneous input	Max. 10
Operating temperature range	-30° to +85°C (without condensation)
Storage temperature range	-40° to +90°C (without condensation)

■ Control Board (COB) Part Numbers

Touch Panel	Mating Control Board	Outer dimension (mm)	Min. order quantity
FID-1540-101-H12	FID-1855-030-A01	60.0 x 30.0 x 4.8	20
FID-1540-121-H12	FID-1855-030-A02		20
FID-1540-061-H15	FID-1855-030-A03		20
FID-1540-081-H15	FID-1855-030-A04		20
FID-1540-141-H18	FID-1855-030-A05		20

■ **Driver Software**

Customized driver software is available for the Windows environment. Please contact your local sales team for information.

Contact

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