

Custom PCAP Touch Panel CAD Drawing Requirements

Drawing checklist for custom cover glass, FPC, controller and enclosure fit review

Revision: Draft v0.1 | Application: Custom cover glass, FPC, controller and enclosure fit review before sample tooling

Accepted file inputs

- Preferred: PDF plus editable DWG, DXF, STEP or STP when available.
- Also useful: CAD screenshot, mechanical sketch, enclosure cutout, connector drawing and host board photo.
- File names should include project code, revision and date to avoid tooling mistakes.

Required drawing layers

Layer | What to define | Why it matters

Outer dimension | Full cover glass or sensor outline | Controls tooling, housing fit and tolerance.

Active area | Electrical touch area | Must cover the usable UI area.

Viewing area | Visible LCD opening or display window | Prevents black border or LCD mismatch.

Cover lens | Thickness, edge radius, holes, slots, logo and print | Affects strength, cosmetics and sealing.

FPC tail | Exit side, length, bend direction and stiffener | Protects assembly space and service access.

Connector | Model, pitch, pin count and mating direction | Prevents host-board mismatch.

Tolerance | Critical dimensions and acceptable deviation | Needed before tooling and sample approval.

Controller and pinout notes

- Mark the required protocol: USB HID, I2C, RS232 or custom.
- Define power voltage, interrupt/reset pins and any host-side connector constraints.
- Show nearby high-current cables, metal frame or noise sources if EMI stability is a concern.

Mechanical questions to answer

- Will the panel be bonded to LCD, installed behind a bezel or exposed as the front lens?
- Is the product used with gloves, water, oil, cleaning liquid or outdoor sunlight?
- What is the target drop, impact, scratch or chemical resistance level?

Revision control

- Mark drawing revision clearly, for example Rev A, Rev B or 2026-06-17.
- Confirm whether changes affect glass tooling, FPC tooling, controller firmware or only label/documentation.
- Do not release tooling until active area, outer dimension, FPC exit and connector are frozen.

Notes

Document status: Draft for RFQ screening. Final specifications depend on drawing review, LCD availability, controller selection and validation tests.

Contact: admin@evergloryltd.com | EverGlory Photoelectric Co., Ltd.