FDC Technology

ENNOVI's FDC Technology is a cost-friendly and sustainable flexible flat device, with fewer manufacturing processes, making it faster to produce at a lower cost. Despite the dimensional considerations needed, there are design and manufacturing processes that overcome the challenges, making FDC ideal for low voltage solutions.

ENNOVI™

COST EFFICIENT

Cost savings of 25% - 50% are achievable without compromising on technical capabilities[1].

[1]Cost in reference to Flexible Printed Circuit (FPC)

FASTER CYCLE TIME

Reduction of 50% manufacturing process steps in comparison with Flexible Printed Circuit (FPC).

EASY TO RECYCLE

Our FDC embraces sustainability with a recyclable process and facilitates the recycling of clean copper waste material.

APPLICATIONS

+ Electric vehicles
+ Commercial transportation
+ Energy storage system
+ Personal mobility

01. DIELECTRIC MATERIAL

+ Dielectric material options – PI or PET.
+ Cold and hot lamination processes are available.

02. TRACES

+ High-precision Die Cutting technology for tight tolerances.
+ Continuous copper traces that provides reliable signal.
+ Double stack layer traces capability to improve packaging efficiency.

03. FUSES

+ Built-in fuse traces or SMT fuses can be incorporated depending on customer requirements.

04. THERMAL SENSOR

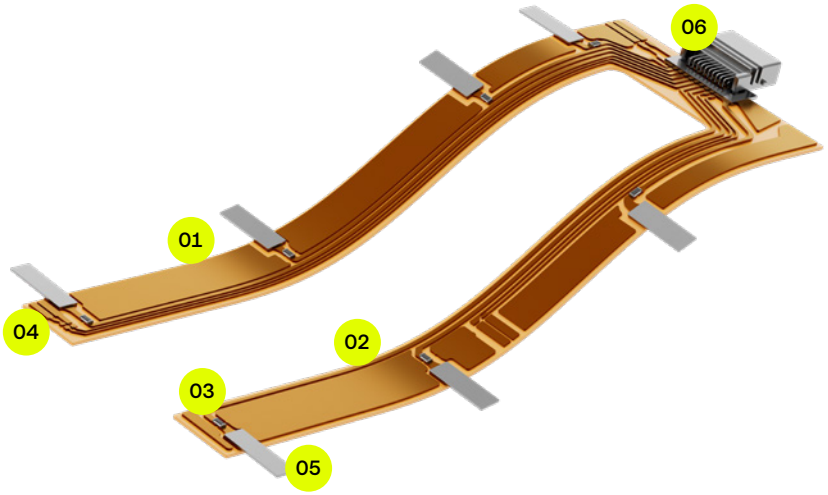
+ Off-the-shelf NTC added using SMT and reflow soldering processes.

05. CURRENT COLLECTOR TABS

+ Material: Nickel
+ Soldered to copper traces for tight packaging space requirements and to achieve reliable signals.

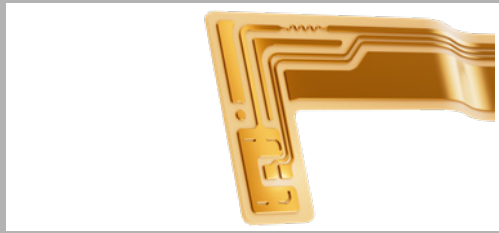
06. CONNECTOR

+ Compatible connectors to copper traces.
+ Solder connector tabs to FDC copper traces.



FDC TECHNOLOGY

INTEGRATED WITH PRISMATIC BATTERY INTERCONNECT SYSTEM



CONVENTIONAL FPC	ENNOVI FDC TECHNOLOGY
Copper Layer: Chemical Etching	**Copper Layer:** Die Cutting
Min. Trace Width: 0.25mm	**Min. Trace Width:** 0.35mm
Min. Trace Pitch: 0.30mm	**Min. Trace Pitch:** 0.35mm
Cost: Higher	**Cost:** Lower
Cycle time: In batches	**Cycle time:** Continuous
Recyclability: NA	**Recyclability:** Yes