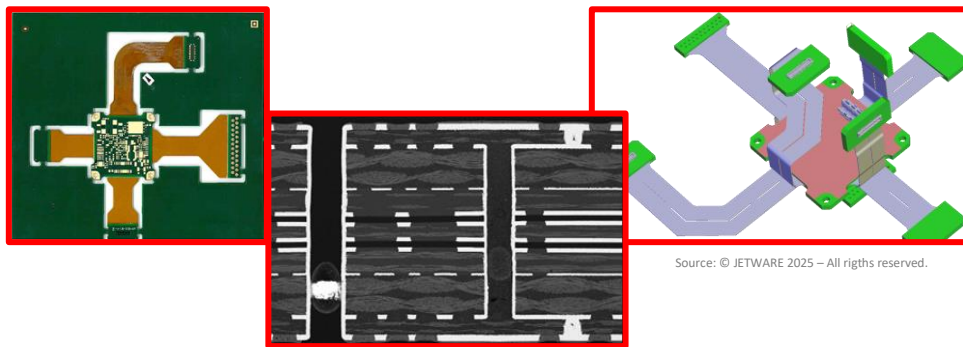


SEC TECH-CLASS

November 13 to 14, 2025



IPC ASSISTED DESIGN OF FLEXIBLE PCB



DETAILS

- From Thursday November 13, 2025 at 8:30 a.m.
- Until Friday November 14, 2025 at 17:30 p.m.
- Location: [Restaurant Terminal 60, Route de l'Aéroport 60, 1950 SION](#)
- Minimum number of registrations: 10
- Maximum number of registrations: 25
- Language: French and/or English (depending on the audience)
- Registration closure: October 31, 2025

EDUCATIONAL GOALS

- Flex and Rigid Flex technologies for a "3D Design" approach of competitive and robust electronic systems combined with high-density HDI and/or high-speed HSD requirements

TARGET AUDIENCE

- Electronic (and mechanical) technicians and engineers

PREREQUISITE

- Motivation for 3D circuit interpretation
- General knowledge of electronics
- Basic knowledge of PCB design

REGISTRATION FEES

- Non-member of the **SEC**: CHF 1'600.- / person
- **SEC BLUE** member: CHF 800.- / person
- **SEC SILVER** or **SEC GOLD** member: CHF 400.- / person
- **SEC SPONSOR** member: Free
- Payment term: in advance



TRAINER

- Sylvain LE ROUX, Director of JETWARE since 2010, IPC CID/CID+ Instructor with 30 years of DFM experience for PCB design

DESCRIPTION

1. Identification of the Flex IPC 2223 Design codes

- Flex Type 1/2/3/4/5
- Uses A/B/C/D
- Static/Dynamic requirements
- High Thermal conditions
- UL identification

2. Specific Designations of the Flexible Polyimide film base material: IPC 4102/03/04

- Selection of materials to build flexible boards
- Identification of the properties of copper laminates
- Implementation of coverlays

3. Copper selection dedicated to bending by IPC 4562

- Mechanical characteristics of copper
- Permissible number of bends
- Elongation performance according to environmental temperature

4. Design rules for each type of Flex IPC 2223

- Single side type 1
- Double side PTH type 2
- Multi layer Flex type 3
- Type 4 rigid-flex
- Double side or Multi layer Type 5

5. Industrial process consideration for fabrication and Assembly IPC 2223

- Identification of the different areas
- Identification of the mechanical stresses
- Definition of the assembly array and processing of panel setting

6. Manufacture of rigid Flex with/without HDI technology IPC 6013 dedicated to the fabrication

- Realization of the type 4 rigid flex
- Analysis of equipment and manufacturing processes
- Configuration of FPC HDI by the implementation of laser drilling

7. Integration of high frequency signals in Flexible boards HSD

- Impedance line implementation
- Performance evaluation
- Construction of Flex dedicated to the high-speed connectors

ONLINE REGISTRATION

By following [THIS LINK](#)

Or by scanning the QR-code:



The SEC is an initiative of [CapQua Sàrl](#), the [FSRM](#) and the [GESO](#) supported by the canton of Neuchâtel and the SECO under the NPR.

