Nomenclature Flex und Flex-Rigid

Both flex and flex-rigid stack-ups are described using the number of layers in the flexible areas. For flex-rigid boards, the position of the layers in the stack-up is also shown. For a simple and clear overview, we have created a short summary of the nomenclature below:

Standard Nomenclature for Stack-ups: \( x \text{ Ri} - y \text{ F} - z \text{ Ri} \)

- \( F = \text{Flex} \)
- \( \text{Ri} = \text{Rigid} \)
- \( x, y, z \ldots \) the figure correlates to the number of copper layers
- If \( x, y \) or \( z \) is missing, this shows a stiffener without copper, e.g. \( \text{Ri} \): Stiffener for TWINflex.

The total number of layers is calculated by the sum of the copper layers on the rigid and flexible material \((x+y+z)\).

Examples:
- 2F: 2 layer flex PCB
- 4F: 4 layer multilayer flex PCB
- 1F-5Ri: 6 layer flex-rigid multilayer with flex on the outer layer
- 2Ri-2F-2Ri: 6 layer flex-rigid multilayer with 2 flex layers on the inner layers
- 2F-Ri: 2 layer TWINflex® with FR4 Stiffener (without copper)
- 1Ri-3Ri: 4 layer FR4 semiflex multilayer with one copper layer in the bendable area

Stack-ups:
- 3Ri-2F-3Ri
- 1F-5Ri
- 2Ri-4Ri
- 2F-Ri