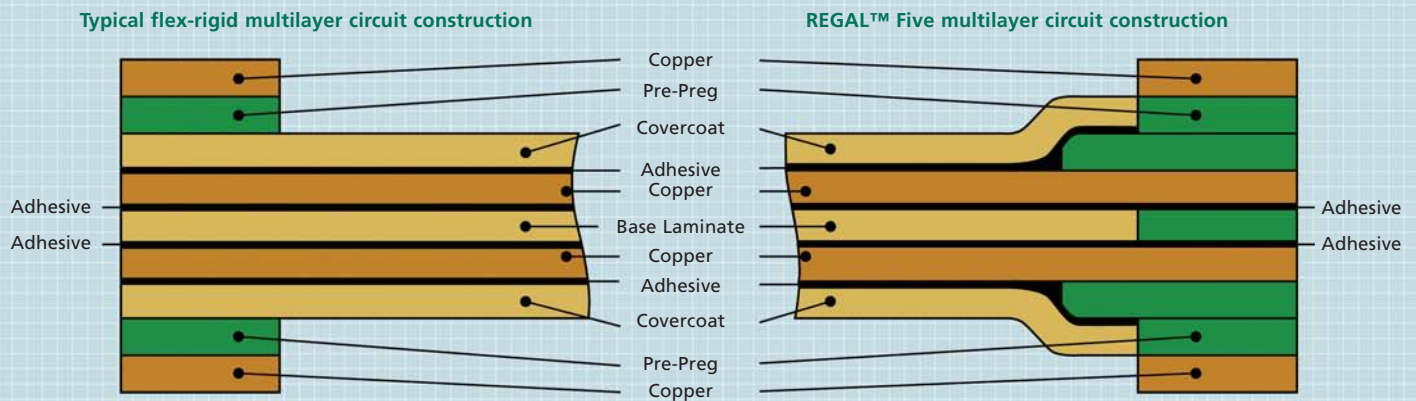


Flex-rigid Multilayer Circuits

A total interconnection and packaging solution



General Description

This technology offers the designer the scope to achieve highly reliable, compact interconnection and packaging configurations with a substantial reduction in overall system cost.

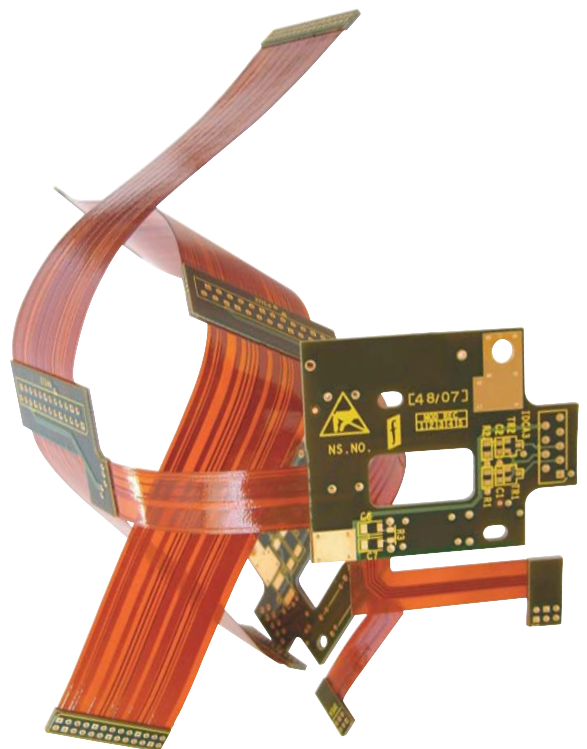
Some of these benefits are associated with the elimination of often expensive connectors and a reduction in the overall time to assemble, test and install in the finished product.

Options

There are two widely used flex-rigid multilayer technologies which can broadly be described as

- Conventionally Structured Technology (adhesive and adhesiveless)
- Regal™ Flex technology (see Regal Flex datasheet)

Both of these constructions have their relative merits be it cost, capability or performance and we would advise that contact be made with our applications engineers in order to determine the most appropriate solution for your requirements.



Flex-rigid Multilayer Circuits

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Conventionally structured flex-rigid multilayers have inner "flex" layers comprising copper clad polyimide (adhesive or adhesiveless) which are continuous throughout the circuit structure, i.e. contained within the "multilayered" and the "flexing" portions.

Circuits structured in this way are generally suitable for low to medium layer count (4 to 20+ layers) circuits where the thermal conditions likely to be experienced in service are not aggressive.

Benefits

A total interconnection solution

- Eliminates connectors
- Increases system reliability
- Low weight
- Low mass
- Ease of component attachment
- Electrical repeatability
- Mechanical repeatability
- Cost effective
- RoHS compliance

Design

The complexity of these products and issues associated with their manufacture are such that dialogue with our applications and / or product engineers during the design phase is recommended.

The cost of manufacture starts with design.

Further details regarding the relative features of Flex-Rigid and Regal™ Flex technologies can be found in the appropriate sections of our comprehensive "Designers Guide".

