Flexible PCB & Flex-Circuit RFQ Checklist

P&A International — engineering-led contract manufacturer + vetted partner-factory network. The more of this you can share, the faster we return a proposed stackup and quote.

1. What to send for a fast, accurate quote

- Flex type: single-sided, double-sided, multilayer, rigid-flex, or flex with stiffener
- Layer count and stackup (or ask us to propose one)
- Base material and copper weight (polyimide thickness, 1/2 oz, 1 oz, 2 oz…)
- Board outline / mechanical drawing (DXF or Gerber) with bend lines and bend radius
- Static or dynamic flex, and the number of flex cycles if dynamic
- Minimum trace/space and minimum drilled/via size; controlled impedance targets
- Coverlay vs solder mask; stiffener locations and material; EMI shielding if needed
- Surface finish (ENIG, immersion tin, OSP…) and any gold-finger requirement
- Standards / IPC class (e.g. IPC-6013 Class 2/3, IPC-2223 design), UL if required
- Assembly (FPCA)? Provide BOM, pick-and-place and any test requirement
- Target cost, prototype quantity, and annual volume or call-off pattern

2. Flex PCB selection quick reference

Decision	Guidance
Flex type	Single/double-sided for simple interconnects; multilayer for density; rigid-flex to replace connectors and cables; stiffeners where connectors mount or components sit.
Material	Polyimide (PI) for most flex; adhesiveless laminates for fine-line and dynamic flex; coverlay thickness set by bend radius and reliability.
Bend radius	Keep static bends ≥ 6× total thickness, dynamic bends ≥ 20×; route traces perpendicular to the bend and stagger layers to avoid I-beam stiffening.
Impedance	Tell us target Zo and tolerance; we set trace width, spacing and stackup and confirm with a controlled-impedance build.
Class	IPC-6013 Class 2 for general products, Class 3 for high-reliability (medical, aerospace, automotive safety).

3. How we work

Send your spec → one dedicated engineer reviews it and confirms the stackup → you receive a proposed design and indicative price (typically within 48 hours) → qualified samples with test data in 10–15 working days → on approval we scale into volume through our vetted partner-factory network, where every supplier is ISO 9000 certified or better.

Send your enquiry and files to support@pa-international.com.au — or use the quote form on the Flexible PCB page. No project too big or too small.