

## How To Receive a Quotation

Dorigo builds products either on a consigned basis, where components and unpopulated printed circuit boards (PCB's) are supplied by the client, or full turnkey, whereby Dorigo procures all of the components, PCB's, metalwork, labels, packaging and everything else required to complete the assembly. Various turnkey services are provided. They include prototype building, production assembly, mechanical assembly, testing, burn-in, and warranty repair. We can also test, package and ship product directly to your end customer. You may choose any or all of these services.

We prefer that information be provided in electronic format. Bills of Materials are normally supplied as Excel spreadsheets or delimited text files. Assembly drawings are most easily read as PDF or Gerber files. PCB information is supplied as Gerber files, preferably with embedded aperture lists. Ideally, the following information is provided in order to provide a quotation:

**Bill of Materials (BOM)** including revision level, component description, device package type, reference designators (eg. R1, U1-4), and quantity per assembly. For turnkey quotes, please include the Approved Vendors or Manufacturers List (AVL, AML) and manufacturer part number for each BOM item, along with any special pricing arrangements that may have been established with particular vendors. Note that usage of any standard defined Dorigo components can help reduce production costs.

**PC Board Information.** Send the Gerber files as you would to a board vendor for quotation. Include any applicable PC board fabrication specifications (contained in a readme text file), paste mask layer and XY coordinate data (in ASCII text file format) for SMT boards. For panelized SMT boards, provide a panelized version of the paste mask layer generated from your PCB fabrication supplier.

**Assembly or Mechanical Drawings** that include the silkscreen and pad layer for PCBs. Any applicable drawings or instructions for top-level PCB assembly, mechanical or final assembly.

**Quantity and Schedule Requirements** including annual volume requirements and anticipated delivery schedule. For turnkey orders, the quantity and schedule can impact the cost of components.

**Sample or Gold Board** if available, with all components installed. A sample board will clarify many assembly issues not obvious from drawings, even if the board is an earlier, yet similar revision.

**Test/Burn-in Requirements:** include a copy of any test procedure showing all equipment used. Dorigo normally provides any test and computer equipment required. Specialized test equipment can be consigned to us, leased or purchased as required. We can also develop automated functional test jigs and fixtures as required.

**Special Workmanship or Quality Assurance Requirements**, if different from industry standards. Unless otherwise specified, Dorigo uses IPC ANSI/J-STD-001 and IPC-A-610C Class 2 workmanship standards on all assemblies. Our quality assurance system is seeking registration by Quality Management System (QMS) to the ISO 9000 standards. Our adherence to these known international standards provides one of the strongest assurances of product and service quality available.

Send documentation to Dorigo: e-mail: [quote@dorigo.com](mailto:quote@dorigo.com) or fax to: (604) 294-4609