



Product information

1 and 2 sided circuit boards

1. Introduction

With this product information, we would like to provide you with some basic details about the manufacture of single and double-sided printed circuit boards. This is meant to help you to make decisions when placing an order. We are happy to send you more extensive product and technology information on request.

2. General details

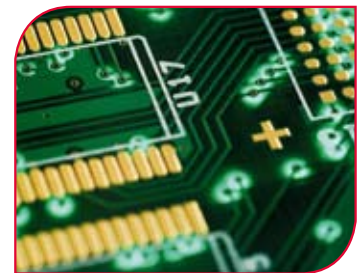
	Standard	Special
Max. circuit size	459 mm x 264 mm	508 mm x 361 mm
Thickness of the printed circuit	0.50 - 0.80 - 1.00 - 1.55 - 2.00 - 2.40 mm	0.1 mm to 4.2 mm
Copper coating	18 - 35 - 70 - 105 µm	as requested

3. Materials

Material type	Material class	We are happy to send datasheets on request.
Standard FR4	Epoxy glass reinforced laminate	
Modified FR4 system	Medium Tg, high Tg, halogen free	
CEM1	Hard paper core with FR4 external layers	
Rogers Ro 4003®	High frequency material	
You are welcome to ask about other materials		

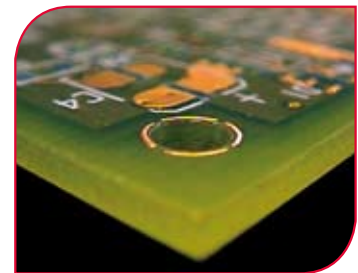
4. Mechanical processing

- Scoring
- Milling contours
- Milling links
- Countersunk drilling
- Vertical milling
- Edge metallisation
- Press-fit technology
- Holes (from 0.10 mm diameter)



5. Finishes

- Solder resist, green (or blue, red, black, colourless)
- Vacrel® (dry film photopolymer solder mask, 75 µm thick)
- Silk-screened component location, white (or yellow, or black)
- HAL, HAL-PbSn
- electroless Sn, electroless Ni/Au
- electroplated Ni/Au (selective or entire surface), electroplating of connectors with Au
- OSP (e.g. Entek® Plus organic surface protection)
- Carbon printing



6. Test systems

- AOI (Automatic Optical Inspection)
- Electrical test (flying probe bare board tester)

7. Test/Standardisation

- Conforms to IPC-A-600 class III
- UL listed (file number E228204)

For further technological questions concerning circuit boards, please contact our team of technologists (Tel. 030/351 788 – 155).