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- □ Electronic manufacturing services
- □ 3 automatic SMD assembly lines
- □ AOI & X-ray inspection
- □ Testing: flying probe & functional
- Automatic coating burn in
- Cableharness and box-building
- Purchase & storage components (see stocklist)
- □ Made in Belgium: complete in house assembly



Page Electronica is a team of about 100 skilled employees and modern equipment for general electronic assembly, test and repair. We are member of different branche-organisations

like Sirris and Imec.

We work according to IPC-A-610D class 2. We have an ISO9001 certificate.

We go for long partnerships with employees, customers and suppliers.

Luc Page

See: www.page.be

Information about contactpersons, see

http://www.page.be/index.php/contacteer-ons/bestukking

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first solder-paste jetter in Belgium

Already many years customers found us for their prototypes.

With the MY500 we can do even better: shorter lead times, and lower costs, no nead for expensive stencils. For large PCB's we can compensate for stretch and shrink, so we even increase quality!

priceindication: assembly process versus

price (+-100 panels +- 20*30 cm 800 comps):

- Single side reflowsoldering: most ideal way of Printed Circuit Board Assembly, simple layout-designrules (+-2 to 5 eurocent per SMD)
- Topside SMD reflow, buttom TH wavesoldering. Typical for industrial products e.g. PC's. See picture
- □ Doublesided Reflow: high density assembly, extra solderingproces: 1 to 1.5 €/panel
- □ SMD-wavesoldering: difficult designrules
- Manual assembly: about 10 eurocent per Through Hole /SMD component, and 4 eurocent per handsoldering, ask advice for application of wave - selective or robotic soldering, each processtep 1 to 2 €/panel



geen afplakwerk op bevestigingsgaten



15 years Page-electronica In 1994 Luc Page started

with electronics & PC assembly and repair. The company PAGE nv evoluated to a high-technology company, where all common electronic parts can be assembled. As wel for proto's, as for 1000's of pieces. Since 2005 Page Electronica has yearly investment of more than 500 000 euro in assembly and testequipment.

Our machines are mainly the big japanese brands (Juki, Marantz, Takaya, Apollo-Seiko).

In 2008 we doubled production floor to a 2500 m². The PC activities, we bundled in the company PAGE cvoa.

prototypes on a few days?

- Flexible assembly machines: stick, bag, tray, we do it!
- No need for solderpaste stencil (240 to 500 euro).
 For the price of the stencil, we make the complete assembly (eg 5 eurocards each 250 smd's en 20 PTH)
- □ For new products we calculate 1 2 weeks, if necessary, we do it in a few days.

From CAD to robot-assembled PCB

Even for 3 PCB's we prefer using our assembly machines. So we are sure all our files are correct. We also try to prepare as much as possible programs for AOI and flying probe.

Since 2009 we have the MY500 pastejetter (<u>www.mydata.com</u> chose my500). For series over 100 panels (typically A4), we prefer a solder paste stencil. In this SMT line we solder in inert atmosphere (vapour phase).

The designer-layouter is always welcome to our production-floor, hence understanding which techniques reduce manual work, and increase quality. This is DFM (Design for Manufacturing) in practice, for advice:

customercontact: (tel 057 346762 - 79 - 61) <u>chris@page.be</u> -<u>Tom.callewaert@page.be</u> - <u>greg@page.be</u>



large series? ...

...don't look too far!

- 3 fast SMD lines, together good for 3 milion SMD's a week, prices start at 1 eurocent/comp
- about 300 000 manual assembled components a week
- with our soldering robots and selective soldering machines we can minimize labour cost
- possibility for coating and potting

Often people are surprised we assemble series of 1000's of pieces. Isn't it something for Romania or China?

Our machines often run in more than 3 shifts. So orders from over 500 000 components, we can assemble in 1 working day, on 1 line, at prices typically 1 eurocent per chip component! Purchasers know that assembly cost of a PCB often is less than 20 % of total cost.

Calculate your "time to market" and stock-rotation, by assembling at your back-door!

The costumer can supply the specific components, or we can buy them for you (see our stocklist)!

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our test- & repairteam...

....good advice and good workmanship

- □ Team of 10 experienced employees
- □ Takaya flying probe (FP) testsystems
- Ingun-test-fixtures, Wayne Kerr MDA
 different network controlled measuring equipment
- Device a Weller BGA and fine-pitch repairstations
- X-ray & optical inspectionsystems

The faster the fault is found, the lower the cost

Even more, when a fault is detected, we try to prevent this fault! Therefore we invested in AOI (automatic optical inspection) and FPT (flying probe testsystems). In cooperation with the customer we also build functional test setup.

Consultation in an early stage concerning CAD (computer aided design), BOM (Bill Of Material) and Gerber file can result in a better and cheaper product.

Design-for-X (Manufacturing, Test, Reliability,...)

Three employees, each 20 years experience in electronic design & manufacturing, are at your service! As an EMS partner we have lots of interests in the PCB-layout, PCB-specification, components... For larger manufacturing projects, we must talk about DFT, traceability, testcoverage en burn-in. We help with passion!

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