



VDL TBP ELECTRONICS

"focus on cost drives out quality..."

focus on quality drives out cost"

# Design for Manufacturing (DfM)

design

block diagram

schematics

placement

routing

validation

## phase 0

(face to face)

## phase 1

## phase 2

### customer delivers VDL TBP Electronics

- designidea (in block diagram)
- batchsize and year volume of product
- traceability
- PCB requirements
- design requirements
- special requirements

### VDL TBP Electronics delivers customer

- DfM guidelines
- data exchange guidelines
- ABC component list
- product manufacturability advise

### customer delivers VDL TBP Electronics

- full BOM containing MPN, manufacturer and circuit references
- ODB++ (CAD data), containing
  - component layers
  - outer copper layers (OCL)
  - solder mask
- requirements described in phase 0

### VDL TBP Electronics delivers customer

- DfM report\* containing:
  - component placement issues
  - footprint issues
  - component placement recommendations
  - footprint recommendations
  - board complexity index

### customer delivers VDL TBP Electronics

- full BOM containing MPN, manufacturer and circuit references
- ODB++ (CAD data) (complete design)
- requirements described in phase 0

### VDL TBP Electronics delivers customer

- final DfM report\* containing:
  - manufacturability recommendations
  - footprint issues
  - component placement issues
  - netlist verification
  - board complexity index
  - production yield

\* if planned in advance, VDL TBP Electronics will deliver DfX reports - regarding only one design - within 72 hours delivery time