



VAN LIMBURG  
ENGINEERING

# Corporate Presentation

2016

## Mission:

Establishing long term business  
relationship

Commitment to become solid business partner

VLE B.V. founded in 1999

VLE Inc founded in 2000

Founder 33+ years in semiconductor industry

# Development software for ATE (Automatic Test Equipment)

- Digital
- Analog
- Mixed Signal
- SOC
- RF applications including RFID

## Design interface hardware

- tester handler hardware interface
- probe card interface
- design circuitry on interface hardware

## Development of tools

- Conversion tools
- Add-on tools to extend life cycle of ATE

## Test applications for:

- Proto type testing
- Probe/wafer testing
- Final test (low volumes)
- Final test (high volumes)
- Qualification
- Characterization
- Transfer into production testing

## New silicon test development:

- Test plan generation, defining
  - Test platform
  - Instruments to use
  - Test method of performing tests
  - (non) Critical tests
- Preparation of Statement of Work (SOW) defining:
  - Deliverables
  - Usage ATE and handler/prober
  - Estimations of development time
  - Acceptance criteria
- documentation

## Test platform conversions:

- Preparation of Statement of Work (SOW)
- Pattern conversion
- Program conversion
- Correlation analysis
- Production release
- documentation

## Test program optimization:

- Parallel / multi side test solutions
- Pattern compression
- Test technique improvements using:
  - Iddq modules
  - SPC tools
- Yield improvement
- Correlation analysis
- Production release
- documentation

## Sustaining support:

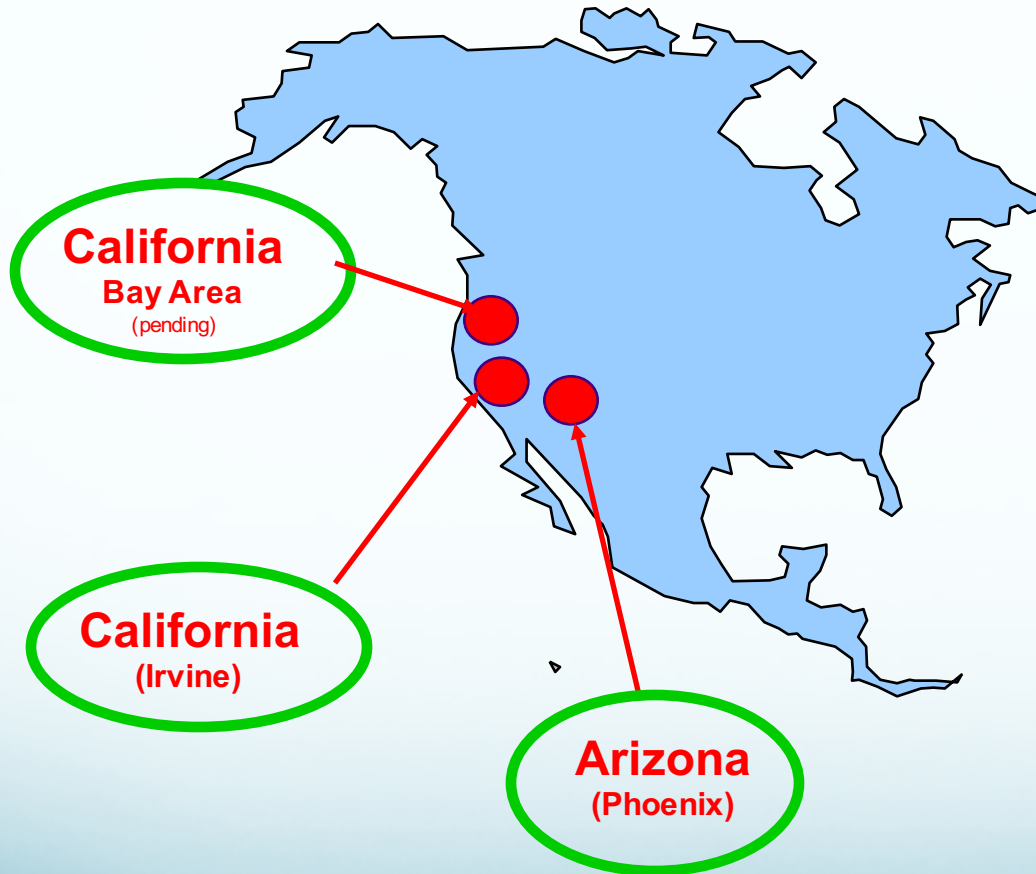
- Parallel / multi side test solutions
- Pattern compression
- Test technique improvements
- Yield improvement
- Investigation customer complaints

## ATE systems supported:

- Advantest 93000  
T2000 (pending)
- LTX Fusion MX
- Teradyne Catalyst / Tiger / A5xx  
J750  
FLEX (micro / Ultra)
- SPEA Comtest MX
- Misc VLCT



## VLE employees



## ATE systems :

- At customer locations
  - Avoid compatibility problems
  - Correct instruments available
  - Avoid problems transferring offshore
- At test house
- At tester manufacturer
- Consigned at VLE
  - Less travel expenses

## Business partners:

- Advantest / Verigy
  - Approved 3rd party vendor
- Teradyne
- LTXC

## Device experience:

- Mixed signal devices:
  - Telecom: CODECS, Modem, ISDN, SLIC, GSM, CDMA, Bluetooth, baseband, TIA, Multiplexers, WDM, SDH
  - Multimedia: CD, DVD, CD RW, HDTV
  - Automotive: airbag controllers, ABS driver, CAN bus, airpressure sensor, audio controllers
  - ADC, DAC and OpAmps
  - Powermanagement devices
  - Video devices
  - WAN/LAN devices

## Device experience:

- Digital
  - Microcontollers / microcontrollers
  - Peripheral devices, disk contollers, DMA interface
  - Parallel/serial, timers, smart cards
- Analog
  - Analog switches
  - MUX/DEMUX
  - Power FET
  - Voltage regulators
  - RF RFID

## Device experience:

- RF
  - RF transceivers
  - Bluetooth
  - Wimax
  - Zigbee
  - DECT
  - GSM
  - Wifi
  - RF Asics
  - RFID

## Tools development:

- Bench top test module using PXI bus structure
- Dedicated capacitor measurement unit for Catalys

## product development:

- Safety light
  - Off speed increased
  - On speed decreased
- Noise generator
  - Specific noise/sound speed increasing
  - Specific noise/sound speed decreasing
- Senior people personal care alarm (under development)



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End of presentation

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thanks for the attention