Customers shall enjoy working with our tools.
User experience is the heart of success
of our fast, creative and efficient solutions for the semiconductor industry.
NplusT Semiconductor Application Center srl
Technical Specification

Architecture
- Structure: Desktop
- Supply: 220V or 110V AC
- Multi-master: Integrated PC
- Extensions: High speed serial link to drive specific external circuits

Software
- Test Execution: RIFLE Control software supporting true interactive testing
- Test Flow Development: Labview VI language
- Device Driver Development: C / C++
- Datalog: XML based
- Data Analysis: BARNIE connection via TCP/IP or off-line
- Prober Control: Driver available for the common automatic and semi-automatic probers

Power Supplies
- Channels: 2
- Voltage Range: 1.2V .. 4.5V
- Current: up to 2A each
- Over-current Protection: fixed at max current
- Accuracy: 25 mV
- Settling Time: 10 msec
- Current Measurement: via PW0

Waveform Generators
- Channels: up to 16 channels
- Standard Type: -12V .. +12V
  - 100 mA
  - 25 mV accuracy
  - 100 MHz
  - 256ksamples buffer
  - 10 nsec rise time
  - -9V .. +36V
  - 50 mA
  - 25 mV accuracy
  - 100 kHz
  - 256ksamples buffer
  - 100 nsec rise time
- High Voltage Type: 1.2V .. 4.5V
  - 500 mA
  - 25 mV accuracy
  - 100 kHz
  - 256ksamples buffer

Digital Signals
- Channels: 32 bidirectional data lines
- 32 address lines
- 16 output-only control lines
- 8 input-only monitor lines
- Clock generator
- Levels: Vih linked to one of the supplies, selectable per bank
- VIl tied to GND
- Vth approx. 50% of Vih
- Edge skew max 5 nsec

Data Source:
- 1k vector buffer
- Fast DMA on the data lines

Formatting:
- 10 nsec vector time
- 5 nsec edge placement (control lines)

Clock Generator:
- Programmable period and duty cycle
- 400 MHz max speed
- 1.25 nsec resolution

Measurement Unit

General
- operation modes:
  - current force voltage measurement
  - voltage force current measurement
  - high impedance voltage measurement
- 70 MHz sampling rate
- 1k buffer
- event or software triggerable
- 2 or 8 channels behind the data lines and on external inputs
- measurement ranges:
  - -1uA .. +1uA
  - -100uA .. +100uA
  - -500uA .. +500uA
  - -1.2V .. +1.2V
  - -12V .. +12V

PMU
- 2 or 8 channels behind the data lines
- measurement ranges:
  - -1uA .. +1uA
  - -100uA .. +100uA
  - -500uA .. +500uA
  - -1.2V .. +1.2V
  - -12V .. +12V

PW0
- 1 channel behind all other lines
- measurement ranges:
  - -500uA .. +500uA
  - -5mA .. +5mA
  - -50mA .. +50mA
  - -1.2V .. +1.2V
  - -12V .. +12V