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- Able to grade test results

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- Easy programming & debugging
- Rich debugging & analytic tools
- Able to generate wafer map files
- Multiple store modes to meet different requirements in saving datalog
- Yield management
- Detailed analysis of test performance



TR6836 features text mode program and it links with Microsoft Visual Studio.NET 2005 closely, for rich debugging and analytic tools. It works on Windows XP operating system with user-friendly GUI. TR6836 seamlessly connects to all popular probers and handlers, and supports max. 8-site parallel testing capability. All these features make TR6836 the best "33MHz Logic IC" tester for both engineering verification and mass production.

## Features

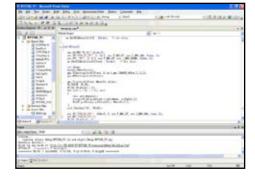
- Maximum 8-sites parallel testing.
- Able to grade the test results.
- Easy programming & debugging: Link with Visual Studio.NET to develop a C++ test program.
- Rich debugging & analytic tools: Module debug tools, SPC,
  - Parametric wafer map tool, Pattern editor, Shmoo, and so on.
- Able to generate wafer map file.
- Multiple store modes to meet different requirements in saving datalog.
- Yield management.
- Detailed analysis of test performance.

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**Test Sequence Editor** 

Test Sequence Editor is a table to designate compared parametrics and test flow.

## **Datalog Window**



Display readable aligned test data, 1 line per test parameter. If test result is fail, the output will be highlighted in red.

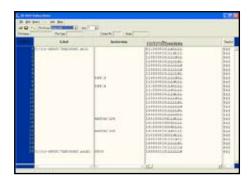
## Features For TR6836

## Test Program Editor

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TR6836 links with Visual Studio.NET to provide an easy programming, easy debugging environment. TR6836 S/W system will auto-create a new function skeleton for each new inserted sequence item. Users only needs to focus on developing the test logics. Users can easily add 3<sup>rd</sup> party libraries to enhance test performance or control external instruments.

#### Pattern Editor

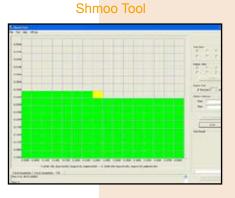


View pattern file offline or view pattern memory online. Enable modifying patterns and save to file. Also refresh the patterns online by designating a specified range.

#### **PHI Settings**

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Set PHI type & parameters in this UI. Users can use a graphics tool to adjust TTL communication timing. This provides a clear timing chart for users.



Enable to vary multiple parameters simultaneously to scan device's boundary.



# TR6836 provides two AC modules (PEB64 & TMU) to measure AC parameters for different purposes. User can change the testing parameters to process various measurements in the tool.

## AC Debug Tools

# Specifications

### System

- 64 to 384 pin logic channels with 64 pin increments.
- Up to 8-site Parallel testing
- Cable mount
- Text mode test program development environment
- Tester controller: PC with Windows XP
- AC Power: 220V @ 30A ±5%
- Size :450L \* 420W \* 400H(mm)

#### PEB64 Pattern Board

- Pin Configuration( I/O Channels): 64 pins
- Parametric Measurement Unit: 8 Sets (PMU chip)
- Voltage Force and Measure Accuracy: ±(1 % of range)
- Current Force and Measure Accuracy: ±(1 % of range )
- Per Pin Level-Set
- Driver Voltage Range: -2.0V to +8V (Vih / Vil)
- Accuracy: ±(0.3 % of 8V range )
- Comparator Voltage Range: -2.0V to +8V (Vih / Vil )
- Accuracy: ±(0.5 % of 8V range)
- Min. Pulse Width: 10ns
- Micro instruction:

#### CALL, RET, MATCH, MPAT, MLEN, RPT, LOOP, LPEND, STOP, TS

- Min. Period: 30ns ~ 40ms
- Period resolution: 10ns
- Data Rate: 33MHz
- Timing Generators: 4 edge / Pin
- Edge Placement resolution: 2.5ns
- Timing Set: 16 change on the fly
- Drive Format Mode: 0, 1, NF, NRZ, RZ, RO, SBC
- IO Format Mode: 0, 1, NF
- Strobe Mode: Edge / Window
- Pattern Memory Depth: 4M~8M
- Fail Memory Depth: 4K
- Pattern Symbol: 0/1//X/Z/L/H
- Time Measurement Resolution: 10ns
- Utility relay: 32
- DVM: 10V, 100mv Range

### Precision Measurement Unit Board

- 8 independent V/I Resources
- System Ground
- Voltage Force and Measure Range: 16V, 8V, 4V, 2V

- Voltage Force and Measure Resolution: 16 bits.
- Voltage Force and Measure Accuracy:
- ▲ 2V: ±(0.05 % of range )
- ▲ 4V: ±(0.05 % of range )
- ▲ 8V: ±(0.05 % of range )
- ▲ 16V: ±(0.05 % of range )
- Voltage clamp Resolution: 16 bits
- Voltage clamp Range: 16V, 8V, 4V, 2V (1.2 Gain)
- Current Force and Measure Range:
- 1uA, 10uA, 100uA, 1mA, 10mA, 100mA, 200mA
- Current Force and Measure Resolution: 16 bits
- Current Force and Measure Accuracy:
- ▲ 1uA: ±(0.2 % + 2nA )
- ▲ 10uA: ±(0.1 % + 100nA)
- ▲ 100uA: ±(0.1 % + 100nA)
- ▲ 1mA: ±(0.1 % + 1uA )
- ▲ 10mA: ±(0.1 % + 10uA)
- ▲ 100mA: ±(0.1 % + 100uA)
- ▲ 200mA: ±(0.1 % + 2mA)
- Current Clamp Resolution: 16 bits
- Current Clamp Range:
- 200mA, 100mA, 10mA, 1mA, 100uA , 10uA, 1uA(1.2 Gain)
- DVM Differential voltage measure between two channels
- Utility Relay: 16

#### **Device Power Supply**

- 4 Device power supply per board
- System Ground
- Voltage force: ± 12V
- Voltage Range: 2V, 4V, 8V, 16V
- Voltage Force and Measure Accuracy:
- ▲ 4V: ±(0.1 % of range )
- ▲ 8V: ±(0.1 % of range )
- ▲ 16V: ±(0.1 % of range )
- Current Range:

2uA, 20uA,200uA, 2mA, 20mA, 200mA, 1A

- Current Force and Measure Accuracy:
- ▲ 20uA: ±(0.2 % of range + 5nA )
- ▲ 200uA,2mA,20mA,200mA: ±(0.2 % of range )
  - 1A: ±(0.2 % of range )
- ▲ DVM: 10V , 100mV Range
  - Utility Relays : 16

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