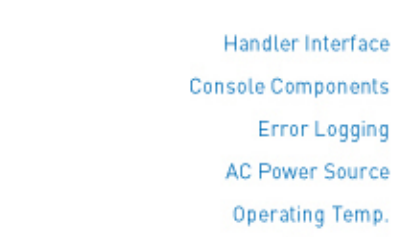
UNI 560

UNI 560 is specially designed for the mass production of DDR and DDR2 component testing. This system supports maximum 256 DUTs parallel testing for x4, x8 devices. Fully automated handler systems support UNI 560 for the mass production.



DDR and DDR2 DRAM Component Testing

UNI 560



General Feature

- Dedicated and sophisticated test system for DDR and DDR2 SDRAM.
- Variable frequency up to 350MHz(700Mbps).
- Support 256 DUTs parallel test.
- Support various types of package(TSOP, FBGA, etc).
- Fully programmable test patterns using UniTest's own powerful test language.
- Programmable address and data scrambling.
- Optimizing setup/hold time of address and data at write cycle and read cycle as frequency changing.
- Variable test voltages(VDD, VDDQ, VTT, VREF).
- Leakage, ICC measurement.
- Built in bitmap and shmoo functions for analysis.
- Graphical and text style logging.
- Fully automated handler interfaced for mass production.

Specification

Memory Types Supported	DDR SDRAM, DDR2 SDRAM
Memory Size Limit(each DUT)	Up to 4GB
Test Frequency	DDR - 100MHz to 350MHz, 1MHz increments
I/O Interface	DDR - SSTL2, DDR2 - SSTL1.8
Address Generation	32G : 16X+16Y+3Z(X=Rows, Y=Columns, Z=Bank Select)
Parallel Test	256 DUTs/system : x4, x8 devices 128 DUTs/system : x16 device 64 DUTs/system : x32 device
Number of Channel	IO : 2816ch, Driver : 1728ch, CLK : 128 - pair ch
Channel configuration of each 2DUT (2-driver shared scheme)	IO : (16-DQ, 1-UDM, 1-LDM, 1-UDQS,1-LDQS, 1-UDQS#, 1-LDQS#) * 2 Driver : 1-CS, 1-RAS, 1-CAS, 1-WE, 2-CKE, 2-ODT, 16-ADDR, 3-BA CLK : (1-CK, 1-CK#) * 2
Number of PPS	128 - VDD, 128 - VDDQ, 16 - Vref, 16 - Vtt
Fixed Timing Edges	DDR - tSU/tHD, tDQS, tDS/tDH, tAC +/- 250 ps accuracy by PLL
Variable Test Voltage	VDD : 0.0V to 3.8V VDDQ : 0.0V to 3.8V Vref : 1/2 of Vdd or Variable(0.0V to 2.0V) Vtt : 1/2 of Vdd or Variable(0.0V to 2.0V)
Icc Measurement(@VDD)	Forcing Voltage : 0.0~4.0V Resolution : 0.01V Measure Range : ±100μA, ±1mA, ±100mA, ±1A
Leakage & OS Measurement	(VFIM) Forcing Voltage : -5V to 7V Measure Range : ±10μA, ±100μA, ±1mA, ±40mA (IFVM) Forcing Current : ±10μA, ±100μA, ±1mA, ±40mA Measure Range : -5V to 5V
Handler Interface	GPIB
Console Components	Any of PC can be used which includes PCI port
Error Logging	Up to 1024
AC Power Source	110 AC - 240 AC, 50/60 Hz
Operating Temp.	10°C~35°C
Automated System I/F(optional)	Memory component handler
Software features	Easy to use UniSDK Software Program with friendly GUI. Communication between console and test site through a parallel bus(UNI BUS).