

SPIDER Max

ATE system for logic / SoC devices

Overview

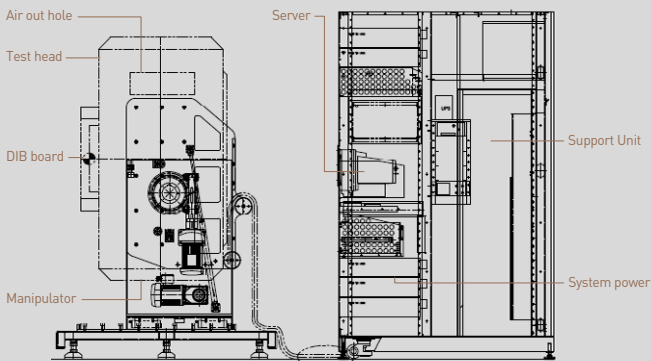
Spider MAX is an ATE system for Logic/SOC devices with up to 2048 digital IO channels and many powerful test features. It provides a 200MHz functional test rate in Single Mode and up to 400MHz using Mux Mode. The system may be used for Standard Logic, ASIC, Micro-Controllers or Graphics/Media processors.

SPIDER MAX is the most affordable system available today and with its ultimate flexibility to be upgraded with Analog and Mixed Signal Options will retain that low cost for the future as well.

Features

- Maximum I/O pins : 1024, 2048
- Maximum analog (DPS, Digitizer) pins : 64
- Total slots : 32
- 12 Gbit fail Map/ capture memory per slot
- Data rate up to 400 MHz (800Mbits) in Mux mode and 200Mhz (400Mbps) in single mode.
- AC/DC calibration and clock generation (100Mhz) included
- Target devices : EEPROM, MCU, Media Processor, Timing Controller and other logic devices.
- 2 ports of Gbit LAN connections (Pattern loading / Background read back) per slot.
- Easy upgrade to SoC and Mixed signal tester.

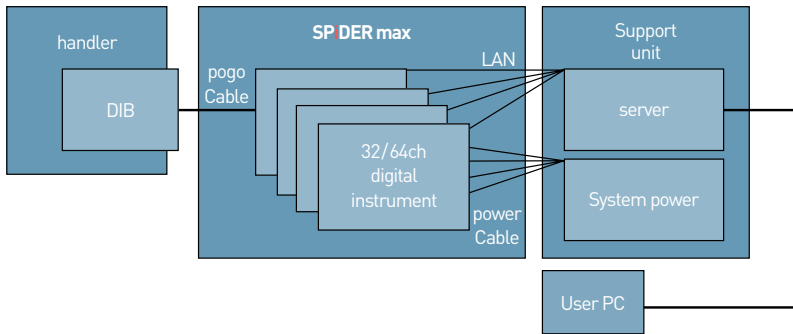
System Outlook



SPIDER Max

Powerful ATE for logic device

Block diagram



Digital instrument board



Specification

Data Rate	Normal Data Rate	200 MHz, 400 Mbits (4 edges in 10 ns period)
	Max Data Rate	400 MHz, 800 Mbits in Mux mode (8 edges in 10 ns period)
Channel count		Maximum 1024 / 2048 ch
Timing sets		32
Timing edges per pin		4
LVM depth		64M
Fail Map/Cmem background read back		800Mbit effective data transfer rate
Drive formats		NRZ, NRZC, RZ, RZC, RO, ROC, RT, RTC, HI, LO, OFF, CLK, CLKC, etc.
Compare formats		Strobe and Window
Period	sets	32
	resolution	40fs
	Max	150us
Edge	placement resolution	42ps
	Maximum delay	150us
	placement accuracy	±200ps
Driver	levels	-1.5V to 6.5V (accuracy : ±10mV)
	current	±60mA
	ON resistance	50 Ohm ±10%
	Rise/Fall time 3V	800ps
	minimum pulse width	2.8ns @3V, 1.0ns @ 1V
	Max toggle rate (3V)	800Mbits per second
Comparator	levels (CvI, CvH)	-1.5V to 6V
	DC accuracy	±10 mV
Current Source load current		±12 mA (accuracy : ±100uA)
PMU	per channel ratio	1:1 (PPMU)
	Force voltage range	-2V to 6V (accuracy: ± 3.3 mV)
	current clamp range	± 110 % of current range (accuracy: ±0.6% of current range)
	measure current ranges	±20mA, ±2mA, ±200uA
	Force Current Ranges	±20mA, ±2mA, ±200uA
	Voltage clamp range	-2V to +6V (accuracy: ±50mV)
	measure voltage range	-2V to +6V (accuracy: ±3.2 mV)
measure voltage VHH channel count	2 channels	
VHH channel output voltage range		0 V ~ 13.5 V
DPS (Device Power Supply)	channel count	Max : 64 ch, min : 16 ch
	channel output voltage range	±11 V
	current range	0 ~ 2 A (4 A in two channel ganged mode)