SCANSTA112VS

Multidrop Multiplexer 100-Pin TQFP Tray

Manufacturer:	Texas Instruments, Inc
Package/Case:	QFP
Product Type:	Drivers
Lifecycle:	Active

Images are for reference only

Inquiry

General Description

The SCANSTA112 extends the IEEE Std. 1149.1 test bus into a multidrop test bus environment. The advantage of a multidrop approach over a single serial scan chain is improved test throughput and the ability to remove a board from the system and retain test access to the remaining modules. Each SCANSTA112 supports up to 7 local IEEE1149.1 scan chains which can be accessed individually or combined serially.

Addressing is accomplished by loading the instruction register with a value matching that of the Slot inputs. Backplane and inter-board testing can easily be accomplished by parking the local TAP Controllers in one of the stable TAP Controller states via a Park instruction. The 32-bit TCK counter enables built in self test operations to be performed on one port while other scan chains are simultaneously tested.

The STA112 has a unique feature in that the backplane port and the LSP0 port are bidirectional. They can be configured to alternatively act as the master or slave port so an alternate test master can take control of the entire scan chain network from the LSP0 port while the backplane port becomes a slave.

Key Features

True IEEE 1149.1 Hierarchical and Multidrop Addressable Capability

The 8 Address Inputs Support up to 249 Unique Slot Addresses, an Interrogation Address, Broadcast Address, and 4 Multi-Cast Group Addresses (Address 000000 is Reserved)

7 IEEE 1149.1-Compatible Configurable Local Scan Ports

Bi-directional Backplane and LSP0 Ports are Interchangeable Slave Ports

Capable of Ignoring TRST of the Backplane Port when it Becomes the Slave.

Stitcher Mode Bypasses Level 1 and 2 Protocols

Mode Register0 Allows Local TAPs to be Bypassed, Selected for Insertion into the Scan Chain Individually, or Serially in Groups of Two or Three

Transparent Mode can be Enabled with a Single Instruction to Conveniently Buffer the Backplane IEEE 1149.1 Pins to Those on a Single Local Scan Port

General Purpose Local Port Pass Through Bits are Useful for Delivering Write Pulses for Flash Programming or Monitoring Device Status.

Known Power-Up State

TRST on all Local Scan Ports

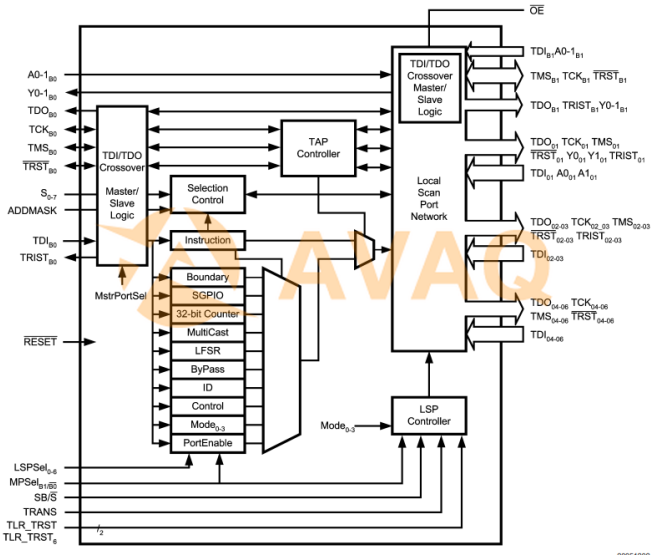
32-bit TCK Counter

16-bit LFSR Signature Compactor

Local TAPs can Become TRI-STATE via the OE Input to Allow an Alternate Test Master to Take Control of the Local TAPs (LSP0-3 have a TRI-STATE Notification Output)

3.0-3.6V VCC Supply Operation

Supports Live Insertion/Withdrawal



Recommended For You

74F283SCX

Texas Instruments, Inc

SOP16

SCANSTA112VS/NOPB

Texas Instruments, Inc

TQFP100

SN74S38N

Texas Instruments, Inc

DIP

SN7438N

Texas Instruments, Inc

DIP14

CD4070BE

Texas Instruments, Inc

DIP14

SN75462P

Texas Instruments, Inc

DIP8

CD74HCT138E

Texas Instruments, Inc

DIP16

CD4098BE

Texas Instruments, Inc

DIP

CD74HC08E

Texas Instruments, Inc

DIP

SN74F08D

Texas Instruments, Inc

SOP-14

SN74LS257BN

Texas Instruments, Inc

DIP16

SN75452BP

Texas Instruments, Inc

DIP8

SN74LS245DW

Texas Instruments, Inc

SOP20

SN74LS74AN

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DIP

SN74S74N

Texas Instruments, Inc

DIP