



# Product overview

## Embedded JTAG Solutions



SCANFLEX Controller .....	1	CION modules .....	13
SCANFLEX Controller for USB/LAN .....	1	CION module/FXT48A.....	13
SFX II CUBE.....	1	CION module/FXT48AJ.....	14
SFX II CUBE Mounting Kit .....	1	CION-LX module/FXT96.....	14
SFX II BLADE 4 .....	2	CION-LX module/FXT192.....	14
SFX II BLADE 4 Mounting Kit.....	2	ChipVORX module/FXT-X32/HSIO4.....	15
SFX II BLADE 4 RMx1/2/3.....	3	ChipVORX module/FXT-X90.....	15
SFX II BLADE 8 RMx1/2.....	4		
Options for SCANFLEX II controller .....	4	Solutions & systems.....	15
SFX II WLAN1.....	4	Studio versions.....	15
SFX II TIC01/LX.....	5	SCANBOOSTER II Designer Studio Base .....	15
SFX II TIC01.....	5	SCANBOOSTER II Designer Studio Standard .....	15
SFX II TIC120/LX .....	5	SFX II Studio Base.....	16
SFX II TEM .....	5	SFX II Studio Standard.....	16
SFX II CUBE SPLITTER.....	6	SFX II Studio Comfort .....	16
SCANFLEX controller for PXI Express .....	6	JULIET .....	17
SFX/PXIe 1149.....	5	JULIET Series 3 .....	17
SCANBOOSTER .....	6	JULIET accessories.....	18
SCANBOOSTER II .....	6	JULIET/Fixture Set.....	18
SCANFLEX for VPC (Virginia Panel Corporation) .....	7	JULIET/Barcode Reader Typ A.....	18
SFX-TAP6/VPC Adapter/ISO .....	7	JULIET/Barcode Reader Typ B.....	18
SFX-TAP6/VPC Adapter/Relay .....	7	JULIET/Self testing fixture .....	18
SFX/VPC-TAP16/M1 .....	7	JULIET/Universal fixture .....	19
SFX/VPC-AMC128L .....	7	JULIET/Toolset.....	19
SFX/VPC-AMC128H.....	8	JULIET/Cover Lift .....	19
Options for SCANFLEX TAP transceiver .....	8	JULIET/Cover Lock .....	19
TIC Extension Module (TEM) .....	8	BARCUDA.....	20
TEM Splitter .....	8	BARCUDA VPC230.....	20
TIC Extension Module/Isolated (TEM/ISO) .....	8	RAPIDO .....	20
TAP Interface Card (TIC) Type 02/SR.....	9	RPS910-S16.....	20
TAP Interface Card (TIC) Type 03/SR.....	9	RAPIDO/S16PLUS.....	20
TAP Interface Card (TIC) Type 02/PMU.....	9	RAPIDO/Barcode Reader Type A.....	21
TAP Interface Card (TIC) Type 022/SR .....	9	RAPIDO SFT .....	21
TAP Interface Card (TIC) Type 122/SR .....	10	FID (TOP oder BOTTOM).....	21
TAP Interface Card (TIC) Type 122/XDP60.....	10		
TIC Self Test Board .....	10	Integration packages .....	21
TIC/FXT Self Test Board .....	10	Acculogic .....	21
TAP Isolator.....	11	ATE-Integration for Acculogic Flying Probe.....	21
SCANFLEX TAP for Gang test/programming .....	11		
SFX-TAP16/G-RM .....	11	VIAVI.....	22
SFX-TAP16/G-RM-FXT .....	11	ATE-Integration for VIAVI MDA/ICT/FKT.....	22
SCANFLEX I/O modules for SCANFLEX und SCANFLEX II.....	12	digitaltest .....	22
SFX-5296LX .....	12	ATE-Integration for Condor Flying Probe digitaltest.....	22
SFX-5296.....	12	ATE-Integration for Entry/Vacuum/Cable digitaltest.....	22
SFX-5350.....	12	Dr. Eschke.....	22
SFX-5212 .....	12	ATE-Integration for Dr. Eschke .....	22
SFX-5704.....	13	Eiger Design .....	23
SFX-6216.....	13	ATE-Integration for Eiger Design .....	23
SFX-6308 .....	13		

Keysight .....	23	Demoboards.....	30
ATE-Integration for Keysight 3070 ICT .....	23	Boundary Scan Coach / EZScan .....	30
LxInstruments .....	23	GoJTAG Demo Board.....	30
ATE-Integration for LXinstruments FCT .....	23	ESA Coach.....	30
Polar Instruments.....	23	Integra V1 .....	30
ATE-Integration for Polar Instruments.....	23		
Reinhardt.....	24	Software.....	31
ATE-Integration for Reinhardt.....	24	CASCON GALAXY-DS Base Edition .....	31
Rohde & Schwarz.....	24	CASCON GALAXY-DS Standard Edition.....	31
ATE-Integration for Rohde & Schwarz TSVP.....	24	CASCON GALAXY-DS Classic Edition .....	32
Seica.....	24	CASCON GALAXY-DS Advanced Edition.....	32
ATE-Integration for Seica Flying Probe .....	24	CASCON GALAXY-TS Run Time Edition .....	33
ATE-Integration for Seica ICT .....	24	CASCON GALAXY-TS Failure Diagnostic Edition .....	33
SPEA .....	25	CASCON GALAXY-TS Failure Diagnostic & Repair.....	34
ATE-Integration for SPEA ICT.....	25		
ATE-Integration for SPEA Flying Probe.....	25		
Takaya.....	25		
ATE-Integration for Takaya APT - Flying Probe.....	25		
Teradyne .....	25		
ATE-Integration for Teradyne Spectrum ICT.....	25		
ATE-Integration for Teradyne Teststation ICT .....	26		
TEST-OK.....	26		
ATE-Integration for TEST-OK.....	26		
TRI.....	26		
ATE-Integration for TRI TR5001.....	26		
Demo kit .....	26		
SYSTEM CASCON Demo kit.....	26		
Accessories .....	27		
VPC modules.....	27		
SFX/VPC-MPP/M1 .....	27		
SFX/VPC-TPC128 .....	27		
SFX/VPC-PWR16-M1.....	27		
CION-ICs & accessories.....	27		
CION .....	27		
CION-LX .....	28		
Boundary Scan Probe .....	28		
Board Grabber & accessories.....	28		
SFX/Board Grabber-L .....	28		
SFX/Board Grabber-XL .....	28		
SFX/Board Grabber-XXL.....	29		
BG-Nail Probe/RA.....	29		
BG-Access Kit/5 .....	29		
BG-Access Kit/10 .....	29		
BG-Nail Holders .....	29		

## SCANFLEX controller

SCANFLEX controller for USB/LAN

### SFX II CUBE



Multifunctional JTAG/Boundary Scan Controller  
for GBit LAN und USB 3.0

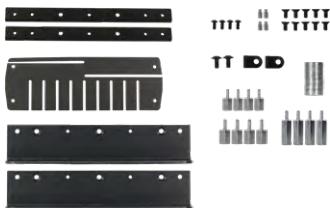
- maximum TCK frequency: 20 MHz / 50 MHz / 100 MHz
- Scan Data Buffer / SPACE™ III Architecture
- ADYCST™ III (Compensation of propagation delays)
- HYSCAN™ (Hybrid Scan, enables the definition of a virtual digital pin electronics)
- FASTSCALE™ (change in the speed level using software, e.g. change to C-controller)
- 2 SFX / LS interfaces (for expansion with SFX carriers and SXFI/O modules)
- 8 JTAG / TAP slots (SFX II TIC or TEM module must be ordered separately)
- 64 MPP (Multi Purpose Port), mixed-signal I/Os to support 8 TAPs
  - *in-built SFX-I/O module with VarioCore support*
  - *each channel can be configured independently (input, output, bidirectional)*
  - *I/O voltage can be programmed in 8 groups, each with 8 channels (0.9-3.6 V)*
  - *driver capability of the channels: +/- 24 mA*
  - *use as generic I/Os, PIP replacement and as control lines in the AFPG (FLASH)*
  - *each signal has a 220 ohm in-line resistor*
- 1 SFX-I/O slot (for expansion with SFX-I/O modules)

### Configuration overview · SCANFLEX II CUBE

	SFX II CUBE-A	SFX II CUBE-B	SFX II CUBE-C
item number	SCO2-010	SCO2-011	SCO2-012
max. TCK frequency	20 MHz	50 MHz	100 MHz
data processing	normal - Scan Data Buffer	fast - SPACE™ III architecture (up to 20 times faster)	fast - SPACE™ III architecture (up to 20 times faster)
upgrade	FASTSCALE™ (upgrade to B- or C-controller)	FASTSCALE™ (upgrade to C-controller)	-

Item no. SCO2-xxx

### SFX II CUBE Mounting Kit



Installation kit for ATE integration of an SFX II CUBE. With threaded feet for direct installation or for fitting with the magnetic feet included. Strain relief for all cable connections.

Item no. STT2-400

## SFX II BLADE 4

SCANFLEX II JTAG/Boundary Scan Controller for GBit LAN and USB 3.0 for average power (without pre-installed TIC / TEM modules)



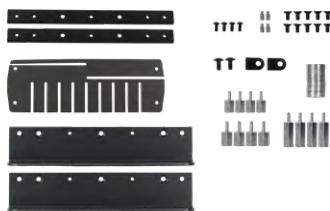
- maximum TCK frequency: 20 MHz / 50 MHz / 100 MHz
- Scan Data Buffer / SPACE™ III Architecture
- ADYCS™ III (Compensation of propagation delays)
- HYSCAN™ (Hybrid Scan, enables the definition of a virtual digital pin electronics)
- FASTSCALE™ (change in the speed level using software, e.g. change to C-controller)
- 2 SFX / LS interfaces (for expansion with SFX carriers and SXF-I/O modules)
- 4 JTAG / TAP slots (SFX II TIC or TEM modules)
- 64 MPP (Multi Purpose Port), mixed-signal I/Os to support 4 TAPs:
  - *in-built SFX-I/O module with VarioCore support*
  - *each channel can be configured independently (input, output, bidirectional)*
  - *I/O voltage can be programmed in 8 groups, each with 8 channels (0.9-3.6 V)*
  - *driver capability of the channels +/- 24 mA*
  - *use as generic I/Os, PIP replacement and as control lines in the APFG (FLASH)*
  - *each signal has a 220 ohm in-line resistor*

### Configuration overview · SCANFLEX II BLADE 4

	SFX II BLADE 4-A	SFX II BLADE 4-B	SFX II BLADE 4-C
item number	SCO2-020	SCO2-021	SCO2-022
max. TCK frequency	20 MHz	50 MHz	100 MHz
data processing	normal - Scan Data Buffer	fast - SPACE™ III architecture (up to 20 times faster)	fast - SPACE™ III architecture (up to 20 times faster)
upgrade	FASTSCALE™ (upgrade to B- or C-controller)	FASTSCALE™ (upgrade to C-controller)	-

Item no. SCO2-02x

## SFX II BLADE 4 Mounting Kit



Installation kit for ATE integration of an SFX II BLADE 4. With threaded feet for direct installation or for fitting with the magnetic feet included. Strain relief for all cable connections.

Item no. STT2-405

## SFX II BLADE 4 RMx3



Up to three independent SCANFLEX II Boundary Scan Controllers for GBit LAN and USB 3.0 (without pre-mounted TIC/TEM modules) for gang applications in a 19" housing (1 U). The controllers are available in different power levels: medium power: A, high power: B and extremely high power: C.

### Features per controller:

- maximum TCK frequency: 20 MHz / 50 MHz / 100 MHz
- Scan Data Buffer / SPACE™ III Architecture
- ADYCS™ III (Compensation of propagation delays)
- HYSCAN™ (Hybrid Scan, enables the definition of a virtual digital pin electronics)
- FASTSCALE™ (change in the speed level using software, e.g. change to C-controller)
- 2 SFX / LS interfaces (for expansion with SFX carriers and SXF-I/O modules)
- 4 JTAG / TAP slots (SFX II TIC or TEM modules must be ordered separately)
- 64 MPP (Multi Purpose Port), mixed-signal I/Os to support 4 TAPs:
  - *in-built SFX-I/O module with VarioCore support*
  - *each channel can be configured independently (input, output, bidirectional)*
  - *I/O voltage can be programmed in 8 groups, each with 8 channels (0.9-3.6 V)*
  - *driver capability of the channels +/- 24 mA*
  - *use as generic I/Os, PIP replacement and as control lines in the APFG (FLASH)*
  - *each signal has a 22 Ω in-line resistor*

## Configuration overview · SCANFLEX II BLADE 4 RMx1/2/3

	SFX II BLADE 4 RMx1/2/3-A	SFX II BLADE 4 RMx1/2/3-B	SFX II BLADE 4 RMx1/2/3-C
item number	SFX II BLADE 4 RMx1-A: SCO2-110 SFX II BLADE 4 RMx2-A: SCO2-120 SFX II BLADE 4 RMx3-A: SCO2-130	SFX II BLADE 4 RMx1-B: SCO2-111 SFX II BLADE 4 RMx2-B: SCO2-121 SFX II BLADE 4 RMx3-B: SCO2-131	SFX II BLADE 4 RMx1-B: SCO2-112 SFX II BLADE 4 RMx2-B: SCO2-122 SFX II BLADE 4 RMx3-B: SCO2-132
number of controllers	SFX II BLADE 4 RMx1-A: 1 SFX II BLADE 4 RMx2-A: 2 SFX II BLADE 4 RMx3-A: 3	SFX II BLADE 4 RMx1-B: 1 SFX II BLADE 4 RMx2-B: 2 SFX II BLADE 4 RMx3-B: 3	SFX II BLADE 4 RMx1-C: 1 SFX II BLADE 4 RMx2-C: 2 SFX II BLADE 4 RMx3-C: 3
max. TCK freqeucy	20 MHz	50 MHz	100 MHz
data processing	normal – Scan Data Buffer	fast - SPACE™ III architecture (up to factor 20 faster)	fast - SPACE™ III architecture (up to factor 20 faster)
upgrade	FASTSCALE (upgrade to B- or C-Controller)	FASTSCALE (upgrade C-Controller)	

Item no. SCO2-13x

## SFX II BLADE 8 RMx1/2



Up to two independent SCANFLEX II Boundary Scan Controllers for GBit LAN and USB 3.0 (without pre-mounted TIC/TEM modules) for gang applications in a 19" housing (1 U). The controllers are available in different power levels: medium power: A, high power: B and extremely high power: C.

### Features per controller:

- maximum TCK frequency: 20 MHz / 50 MHz / 100 MHz
- Scan Data Buffer / SPACE™ III Architecture
- ADYCS™ III (Compensation of propagation delays)
- HYSCAN™ (Hybrid Scan, enables the definition of a virtual digital pin electronics)
- FASTSCALE™ (change in the speed level using software, e.g. change to C-controller)
- SFX / LS interfaces (for expansion with SFX carriers and SXF-I/O modules)
- JTAG / TAP slots (SFX II TIC or TEM modules must be ordered separately)
- MPP (Multi Purpose Port), mixed-signal I/Os to support 4 TAPs:
  - *in-built SFX-I/O module with VarioCore support*
  - *each channel can be configured independently (input, output, bidirectional)*
  - *I/O voltage can be programmed in 8 groups, each with 8 channels (0.9-3.6 V)*
  - *driver capability of the channels +/- 24 mA*
  - *use as generic I/Os, PIP replacement and as control lines in the AFPG (FLASH)*
  - *each signal has a 22 Ω in-line resistor*

## Configuration overview · SCANFLEX II BLADE 8 RMx1/2

	SFX II BLADE 8 RMx1/2-A	SFX II BLADE 8 RMx1/2-B	SFX II BLADE 8 RMx1/2-C
item number	SFX II BLADE 8 RMx1-A: SCO2-140 SFX II BLADE 8 RMx2-A: SCO2-150	SFX II BLADE 8 RMx1-B: SCO2-141 SFX II BLADE 8 RMx2-B: SCO2-151	SFX II BLADE 8 RMx1-B: SCO2-142 SFX II BLADE 8 RMx2-B: SCO2-152
number of controllers	SFX II BLADE 8 RMx1-A: 1 SFX II BLADE 8 RMx2-A: 2	SFX II BLADE 8 RMx1-B: 1 SFX II BLADE 8 RMx2-B: 2	SFX II BLADE 8 RMx1-C: 1 SFX II BLADE 8 RMx2-C: 2
max. TCK freqeucy	20 MHz	50 MHz	100 MHz
data processing	normal – Scan Data Buffer	fast - SPACE™ III architecture (up to factor 20 faster)	fast - SPACE™ III architecture (up to factor 20 faster)
upgrade	FASTSCALE (upgrade to B- or C-Controller)	FASTSCALE (upgrade C-Controller)	

Item no. SCO2-1xx

## Options for SCANFLEX II controller

### SFX II WLAN1



- Wireless LAN (WLAN) 150 Mbit/s USB 2.0 Adapter with swivel-mounted and detachable antenna for connection to SFX II controller
- compatible with the IEEE 802.11b/g/n standard
- WPA, WPA2 encryption
- 2,4 GHz frequency band

Item no. SCO2-WLAN1

## SFX II TIC01 / LX



TAP Interface Card as a plug-in module for SFX II Controller & SCANBOOSTER II Controller

- 1 JTAG port / TAP with single-ended interface
- programmable input (0.0-3.0 V) and output voltage (0.9-3.6 V)
- programmable input and output impedance
- programmable drive strength
- relay-switched 5 V output signal

Item no. STT2-110

## SFX II TIC01 / LX



TAP Interface Card as a plug-in module for SFX II Controller & SCANBOOSTER II Controller

- 1 JTAG port / TAP with single-ended interface
- programmable input (0.0-3.0 V) and output voltage (1.8-4.5 V)
- programmable input and output impedance
- programmable drive strength
- relay-switched 5 V output signal

Item no. STT2-111

## SFX II TIC120 / LX



### Features:

- 20 pole plug connector
- supported by various debug protocols
  - JTAG, SWD, SBW, BDM, PIC1x, H/S CSI, SWIM, RS232
- voltage range 0.9-3.6V
- internal modul

### Requirements:

- must be plugged into a SCANFLEX II controller
- CASCON version 4.7.0 or higher

Recommended accessories: SFX II CUBE SPLITTER article no.: (STT2-131)

Item no. STT2-311

## SFX II TEM



TIC extension module as a plug-in module for SFX II Controller

- with differential interface for connecting all external TIC modules

Item no. STT2-130

## SFX II CUBE SPLITTER

Adapter from a 20-pin high-density socket to two 10-pin low-density plug connectors

- compatible with SFX II TEM, SFX II TEM/ISO and SFX II TIC020/LX of the SFX II CUBE
- for IDC socket assemblies or wire-wrap connections



Item no. STT2-131

## SCANFLEX controller for PXI Express

### SFX / PXIe 1149



#### SCANFLEX JTAG/Boundary Scan Controller for PXI Express

- 1 Slot / 3U PXI module
- maximum TCK frequency: 20 MHz / 50 MHz / 80 MHz
- Scan Data Buffer / SPACE™ II Architecture
- ADYCS™ II (Compensation of propagation delays)
- HYSCAN™ (Hybrid Scan, enables the definition of a virtual digital pin electronics)
- FASTSCALE™ (change in the speed level using software, e.g. change to C-controller)
- 1 SFX interface (port for all SCANFLEX TAP transceivers)
- 2 SFX / LS interfaces (for expansion with SFX carriers and SXF-I/O modules)

## Configuration overview · SCANFLEX controller for PXI Express

	SFX PXIe-A	SFX PXIe-B	SFX PXIe-C
item number	SCO-050	SCO-051	SCO-052
max. TCK frequency	20 MHz	50 MHz	80 MHz
data processing	normal - Scan Data Buffer	fast - SPACE™ II architecture (up to 10 times faster)	fast - SPACE™ II architecture (up to 10 times faster)
upgrade	FASTSCALE™ (upgrade to B- or C-controller)	FASTSCALE™ (upgrade to C-controller)	-

Item no. SCO-05x

## SCANBOOSTER

### SCANBOOSTER II



SCANBOOSTER II Boundary Scan Controller for GBit LAN and USB2.0 for moderate performance range (without preassembled TIC/TEM modules)

- maximum TCK frequency: 16MHz
- ADYCS™ III (compensation of propagation delays, without propagation delay measurement)
- 2 JTAG/TAP slots (SFX II TIC or TEM modules must be ordered separately)
- 32 MPP (Multi Purpose Port), mixed signal I/Os to support 2 TAPs
  - every channel is independent configurable (input, output, bi-directional)
  - I/O voltage is programmable (0.9-3.6V) in 4 groups of 8 channels
  - driving ability of the channels +/- 24mA
  - usage as Generic I/Os, PIP replacement and control lines in the APFG (FLASH)
  - every signal is equipped with a 22 Ohm in-line resistor

Item no. 111-200

## SCANFLEX for VPC (Virginia Panel Corporation)

## SFX-TAP6 / VPC Adapter / ISO



- Mass Interconnect Interface for up to 6 TAPs and PIP / MPP signals (SFX-TAP6 / FXT( / ISO) or SCANFLEX II CUBE with 6 x SFX II TEM( / ISO))
- based on the 192-pin receiver from Virginia Panel (P / N 510150152)
- support for 2 x 6 x 10-pin and 4 x 12-pin

Item no. STT-500

## SFX-TAP6 / VPC Adapter / Relay



- Mass Interconnect Interface for up to 6 TAPs and PIP / MPP signals (SFX-TAP6 / FXT( / ISO) or SCANFLEX II CUBE with 6 x SFX II TEM( / ISO))
- based on the 192-pin receiver from Virginia Panel (P / N 510150152)
- including support for 2 x 60-pin and 1 x 40-pin

Item no. STT-501

## SFX / VPC-TAP16 / M1



## Fixture SCANFLEX TAP transceiver for gang applications

- also available as FXT variant (with differential transmission)
- Mass Interconnect Interface for 8 x 2 TAPs (eight TAPs with two TDIs for each TAP)
- 16 built-in TIC020 with multi-bus interface for extended VarioTAP support
- programmable input (0.0-3.0 V) and output voltage (1.8-4.5 V) for each TAP
- programmable input and output impedance for each TAP
- relay-switched 5 V output signal for each TAP when using the SFX / VPC-MPP / M1 card
- 1 SFX / LS interface (for expansion with SFX carriers and SXF-I/O modules)

\*Note: more VPC modules on page 30

Item no. RPD-700

## SFX / VPC-AMC128L



## SCANFLEX Analog Measurement Card

- 128 independent measuring channels (16 simultaneously)
- VPC interface with 192-pin receiver from Virginia Panel (P/N 510150152)
- 3 measuring ranges: +/-2,5 V, +/-5 V and +/-10 V
- for each of the 128 measuring channels independent, programmable voltage ranges in 3 steps
- control via Gigabit LAN and web interface
- no driver installation required

\*Note: more VPC modules on page 30

Item no. RPD-760

## SFX / VPC-AMC128H



### SCANFLEX Analog Measurement Card

- 128 independent measuring channels (16 simultaneously)
- VPC interface with 192-pin receiver from Virginia Panel (P/N 510150152)
- 3 measuring ranges: +/-2,5 V, +/-5 V and +/-10 V
- for each of the 128 measuring channels independent, programmable voltage ranges in 3 steps
- control via Gigabit LAN and web interface
- no driver installation required

\*Note: more VPC modules on page 30

Item no. RPD-761

## Options for SCANFLEX TAP transceiver

### TIC Extension Module (TEM)



TIC extension module as a plug-in module for Desktop SCANFLEX TAP transceiver 2 / 4 / 6 / 7 / 8S and SCANBOOSTER

- with differential interface for connecting all external TIC modules
- TEM (TIC) cable 0.5 m included

Item no. STT-130

### TEM Splitter



Adapter from a 20-pin high-density socket to two 10-pin low-density plug connectors

- plug-on module on SCANFLEX TEM or TEM / ISO
- for IDC socket assemblies or wire-wrap connections

Item no. STT-131

### TIC Extension Module / Isolated (TEM / ISO)



TIC extension module / isolated as a plug-in module for Desktop SCANFLEX TAP transceiver 2 / 4 / 6 / 7 / 8S

- with differential and isolated interface for connecting all external TIC modules
- maximum TCK frequency: 65 MHz
- TEM (TIC) cable 0.5 m included

Item no. STT-132

## TAP Interface Card (TIC) Type 02 / SR



TAP Interface Card as a fixture assembly module for connection to replaceable or built-in TEM or TEM/ISO

- suitable for all SCANFLEX TAP transceivers, SCANBOOSTER and SCANFLEX II Controller with differential interface (FXT)
- 1 JTAG port / TAP with single-ended interface
- adjustable input (0.0-3.3V, preset to 1.0V or external) and output voltage (1.65-3.6V, preset to 3.3V or external)
- relay-switched 5 V output signal
- cut-off relay for TAP and AUX signals

---

Item no. STT-121

---

## TAP Interface Card (TIC) Type 03 / SR



TAP Interface Card as a fixture assembly module in a climatic chamber for connection to replaceable or built-in TEM or TEM/ISO

- suitable for all SCANFLEX TAP transceivers, SCANBOOSTER and SCANFLEX II Controller with differential interface (FXT)
- 1 JTAG port / TAP with single-ended interface
- adjustable input (0.0-3.3 V, preset to 1.0 V or external) and output voltage (1.65-3.6 V, preset to 3.3 V or external)
- relay-switched 5 V output signal
- cut-off relay for TAP and AUX signals
- temperature range from -40 °C to 80 °C

---

Item no. STT-123

---

## TAP Interface Card (TIC) Type 02 / PMU



TAP Interface Card as a fixture assembly module for connection to replaceable or built-in TEM or TEM / ISO

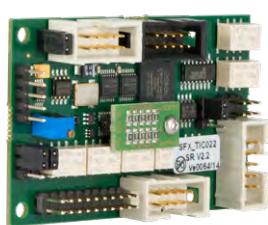
- suitable for all SCANFLEX TAP transceivers and SCANFLEX II Controller with differential interface (FXT)
- 1 JTAG port / TAP with single-ended interface
- adjustable input (0.0-3.3 V, preset to 1.0 V or external) and output voltage (1.65-3.6 V, preset to 3.3 V or external)
- relay-switched 5 V output signal
- cut-off relay for TAP and AUX signals
- additionally built-in precision-measuring unit (PMU) for unpowered open / short tests
- can be used with PXI or SCANFLEX I/O modules

---

Item no. STT-124

---

## TAP Interface Card (TIC) Type 022 / SR



TAP Interface Card as a fixture assembly module for connection to replaceable or built-in TEM or TEM / ISO

- suitable for all SCANFLEX TAP transceivers and SCANFLEX II Controller with differential interface (FXT)
- 1 JTAG port / TAP with single-ended interface
- adjustable input (0.0-3.3 V, preset to 1.0 V or external) and output voltage (1.65-3.6 V, preset to 3.3 V or external)
- relay-switched 5 V output signal
- cut-off relay for TAP and AUX signals
- with multi-bus interface for extended VarioTAP support

---

Item no. STT-126

---

## TAP Interface Card (TIC) Type 122 / SR



TAP Interface Card as a fixture assembly module for connection to replaceable or built-in TEM or TEM / ISO

- suitable for all SCANFLEX TAP transceivers und SCANFLEX II Controller with differential interface (FXT)
- 1 JTAG port / TAP with single-ended interface
- adjustable input (0.0-3.3 V, preset to VOUT / 2 or external) and output voltage (0.9-3.6 V, fixed at 3.3 V or external, present to external)
- relay-switched 5 V output signal
- cut-off relay for TAP and AUX signals
- with multi-bus interface for extended VarioTAP support
- support for Intel architecture

---

Item no. STT-134

---

## TAP Interface Card (TIC) Type 122 / XDP60



Special impedance-controlled connection cable for TIC122 / S(R) for connection to the Intel XDP60 Debug plug connector

---

Item no. STT-135

---

## TIC Self Test Board

Self-testing module for JTAG / TAP signals

- Plug-in card for standard 10-pin TAP connector of the TIC modules



---

Item no. STT-115

---

## TIC / FXT Self Test Board

Self-testing module for JTAG / TAP signals

- for fixture applications
- 7 cables with female connectors, with terminals for contacting the transceiver contacts or ICT pins included



---

Item no. STT-116

---

## TAP Interface Card (TIC) Type 020



TAP Interface Card as a plug-in module for Desktop SCANFLEX TAP transceiver 2 / 4 / 6 / 7 / 8

- 1 JTAG port / TAP with single-ended interface
- programmable input (0.0-3.0 V) and output voltage (1.8-4.5 V)
- programmable input and output impedance
- relay-switched 5 V output signal
- TIC cable 0.5 m included
- with multi-bus interface for extended VarioTAP support

Item no. STT-310

## TAP Isolator



External Desktop Box for isolating TAP signals between primary interface and target

- selectable output voltage (2.5 V, 3.3 V or adjustable 1.65-4.5 V)
- maximum TCK frequency: 65 MHz
- TAP cable included
- external 5 V power supply required

Item no. STT-910

## SCANFLEX TAP transceiver for gang testing and programming

### SFX-TAP16 / G-RM



SCANFLEX TAP transceiver for gang applications in a 19" housing (1U)

- 8 x 2 TAPs (eight TAPs with two TDIs for each TAP)
- 16 built-in TIC020 with multi-bus interface for extended VarioTAP support
- programmable input (0.0-3.0 V) and output voltage (1.8-4.5 V)

Item no. STT-700

### SFX-TAP16 / G-RM-FXT



SCANFLEX TAP transceiver for gang applications in a 19" housing (1U)

- 8 x 2 differential TAPs (eight TAPs with two TDIs for each TAP)
- 16 built-in TEM modules
- an external differential TIC module is required for each TAP used (not included)

Item no. STT-710

## SFX I/O modules for SCANFLEX und SCANFLEX II

## SFX-5296LX



## SCANFLEX digital I/O module (mixed signal)

- 96 single-ended (SE) test channels in 3 x 32-bit groups; I/O voltage per group: 0.9-3.6 V; driver capability of the channels: +/- 24 mA
- I/O voltage is programmable for any group
- each channel can be configured independently (input, output, bi-directional) and supports the unstress function
- extended test resources at the I/O pins (SE):
  - 12-bit ADC + 1k RAM (signal recorder)
  - 10-bit DAC + 1k RAM (arbitrary waveform generator)
  - event detector
  - frequency meter
  - connectable pull-up and pull-down resistors (each 10k)
  - setting for the drive strength

Item no. SMO-001

## SFX-5296



## SCANFLEX digital I/O module

- 96 single-ended (SE) test channels in 3 x 32-bit groups; I/O voltage per group: 0.9-3.6 V; driver capability of the channels: +/- 24 mA
- each channel can be configured independently (input, output, bi-directional and tri-state)
- I/O voltage is programmable for any group

Item no. SMO-000

## SFX-5350



## SCANFLEX digital I/O module

- 50 differential test channels
- standard interface: LVDS (can be changed by a module update)
- driver capability of the channels is dependent on the I/O standard
- each channel can be configured independently (input, output, bi-directional and tri-state)

Item no. SMO-005

## SFX-5212



## SCANFLEX digital I/O module

- 12 single-ended (SE) test channels in 1 x 12-bit groups; I/O voltage per group: 12 / 24 V internal or 8-30 V external; driver capability of the channels: +/- 150 mA (@ external)
- I/O voltage is programmable for any group
- each channel can be configured independently (input, output, bi-directional and tri-state)

Item no. SMO-008

## SFX-5704



### SCANFLEX mixed-signal I/O module

- 4 single-ended (SE) test channels in 4 x 1-bit groups; I/O voltage per group: -10 - +10 V; driver capability of the channels: +/- 300 mA
- I/O voltage is programmable for any group
- each channel consists of a driver / sensor stage
- 12-bit ADC for discrete recording of measurement values
- cut-off relay for galvanic isolation of the driver / sensor channels
- can be used in conjunction with SFX carrier 5, SFX-TAP8 or SFX-TAP8 / FXT (module must support 48 V, see documentation)
- external 48 V power supply (P / N STT-900) required

Item no. SMO-011

## SFX-6216



### SCANFLEX analogue measuring module

- 16 analogue measurement channels with cut-off relay for galvanic isolation
- 12-bit ADC with 4 channels (250 kSPS) enables simultaneous measurement of 4 of the 16 channels
- programmable ±50 V and ±5 V voltage range per channel
- input impedance > 1 MΩ

Item no. SMO-026

## SFX-6308



### SCANFLEX analogue I/O module, operation only with SFX carriers and SFX-TAP8

- 4 analogue measurement and driver channels with cut-off relay for galvanic isolation
- output voltage channels and measurement inputs have a voltage resolution of 12 bit in a range between -10 V and +10 V
- input impedance > 1 MΩ
- 8 digital I/O pins can be used as external trigger inputs

Item no. SMO-121

## CION modules

### CION Module / FXT48A



### JTAG/Boundary Scan I/O module (mixed signal)

- 48 single-ended (SE) Boundary Scan test channels in 2 x 8-bit groups and 2 x 16-bit groups; I/O voltage per group: 1.8-5.0 V; driver capability of the channels: +/- 24 mA
- I/O voltage fixed on the board: 3.3 V
- I/O voltage is adjustable for any group
- each channel can be configured independently (input, output, bidirectional) and supports the unstress function
- maximum TCK frequency: 33 MHz
- 4 ADC channels (0-5 V) / 2 ADC channels (0-10 V) / 2 ADC channels (0-30 V)
- 4 DAC channels (10 bit, 0-4,096 V)
- 2 optically isolated digital inputs / 2 optically isolated digital outputs
- 1 RS485 transceiver / 2 RS232 transceiver
- cascadable

Item no. 340-023

## CION-LX Module / FXT48AJ



### JTAG/Boundary Scan I/O module

- 48 Boundary Scan test channels, provided by CION-LX ICs
- logic level adjustable from 0.9 V to 3.6 V in four groups (2x16 and 2x8 bit)
- driver capability of the channels: ±24 mA at 3.3 V
- CION-LX has extended test resources that are available at the 48 I/O pins:
  - 12-bit ADC (*signal recorder*)
  - 10-bit DAC (*arbitrary waveform editor*)
  - event detector
  - frequency meter
  - connectable pull-up and pull-down resistors of 10 kOhm each
  - setting for the drive strength
- driver capability of the channels: ±24 mA
- a 12-bit AD converter LTC2309
- 4 ADC channels (0-5 V) / 2 ADC channels (0-10 V) / 2 ADC channels (0-30 V)
- 2 10-bit DA converters / 2 DAC channels (0-4,096 V)
- 2 optically isolated digital inputs / 2 optically isolated digital outputs
- 1 RS485 transceiver / 2 RS232 transceivers
- cascadable

Item no. CLXM-003

## CION-LX Module / FXT96

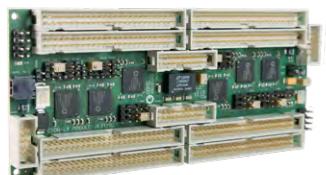


### JTAG/Boundary Scan I/O module (mixed signal)

- 96 single-ended (SE) Boundary Scan test channels in 3 x 32-bit groups; I/O voltage per group: 0.9-3.6 V; driver capability of the channels: +/- 24 mA
- 12 high-current (HC) Boundary Scan test channels in 1 x 12-bit group; I/O voltage per group: 0.9-2.0 V; driver capability of the channels: +/- 40 mA
- 24 differential (DE) Boundary Scan test channels in 1 x 24-bit group; LVDS or CML; with full support for IEEE1149.6
- I/O voltage fixed on the board: 3.3 V, 2.5 V, 1.2 V
- I/O voltage is adjustable for any group
- each channel can be configured independently (input, output, bidirectional) and supports the unstress function
- maximum TCK frequency: 100 MHz
- extended test resources at the I/O pins:
  - 12-bit ADC + 1k RAM (*signal recorder*) at SE and HC pins
  - 10-bit DAC + 1k RAM (*arbitrary waveform generator*) at SE and HC pins
  - event detector at all pins
  - frequency meter at all pins
  - connectable pull-up and pull-down resistors (each 10k) at SE and HC pins
  - setting for the drive strength at SE and HC pins

Item no. CLXM-000

## CION-LX Module / FXT192



### JTAG/Boundary Scan I/O module (mixed signal)

- 192 single-ended (SE) Boundary Scan test channels in 6 x 32-bit groups; I/O voltage per group: 0.9-3.6 V; driver capability of the channels: +/- 24 mA
- 24 high-current (HC) Boundary Scan test channels in 2 x 12-bit groups; I/O voltage per group: 0.9-2.0 V; driver capability of the channels: +/- 40 mA
- 48 differential (DE) Boundary Scan test channels in 2 x 24-bit groups; LVDS or CML; with full support for IEEE1149.6
- I/O voltage fixed on the board: 3.3 V, 2.5 V, VI/O (default 1.2 V)
- I/O voltage is adjustable for any group

- each channel can be configured independently (input, output, bidirectional) and supports the unstress function
- maximum TCK frequency: 100 MHz
- extended test resources at the I/O pins:
  - 12-bit ADC + 1k RAM (*signal recorder*) at SE and HC pins
  - 10-bit DAC + 1k RAM (*arbitrary waveform generator*) at SE and HC pins
  - event detector at all pins
  - frequency meter at all pins
  - connectable pull-up and pull-down resistors (each 10k) at SE and HC pins
  - setting for the drive strength at SE and HC pins

---

Item no. CLXM-002

---

## ChipVORX Module / FXT-X32 / HSIO4



ChipVORX module for testing high-speed interfaces

- 4 Slots for interface adapter cards for high-speed I/O test (incl. bit error rate test), each with 2 serial high-speed transceivers with maximum 6.6 Gbit/s
- 32 Boundary Scan test channels with 3.3 V (no 5.0 V I/O tolerance), provided by a freely programmable Xilinx Kintex-7 FPGA
- driver capability of the channels max.  $\pm 16$  mA
- universal 32 MHz and 100 MHz clock generators
- special support for ChipVORX technology
- additional four SPI configuration memories

---

Item no. CXIO-030

---

## ChipVORX Module / FXT-X90



ChipVORX I/O module with configurable FPGA

- 90 Boundary Scan test channels, provided by a freely programmable Xilinx Spartan-6 FPGA
- Logic level adjustable from 1.2 V to 3.3 V for 76 channels (no 5.0 V I/O tolerance)
- fixed logic level for 14 channels with 3.3 V (no 5.0 V I/O tolerance)
- the data transmission direction of each test channel can be freely programmed
- driver capability of the channels max.  $\pm 24$  mA
- universal 32 MHz clock generator
- special support for ChipVORX technology

---

Item no. CXIO-010

---

## Solutions & systems

### Studio versions

#### SCANBOOSTER / USB Designer Studio Base

System components in the hardware / software bundle:

- SCANBOOSTER / USB (2 TAP Version)
- CASCON GALAXY-DS Base / SX Edition incl.
- portable licence via USB, no floating licence
- software maintenance contract for one year (SMC)




---

Item no. SHB-020

---

## SCANBOOSTER / USB Designer Studio Standard

System components in the hardware / software bundle:

- SCANBOOSTER / USB (2 TAP Version)
- CASCON GALAXY-DS Standard / SX Edition incl.
- portable license via USB
- software maintenance contract for one year (SMC)



Item no. SHB-021

## SFX II Studio Base

SCANFLEX II Designer Studio Base

- SFX II CUBE Controller - Speedgrade A incl. 2 x multi-bus connections (JTAG, SWD, etc.)
- goJTAG Demo Board
- CASCON GALAXY Development Station Base
- licence via USB dongle
- software maintenance contract for one year (SMC)



Item no. SHB-040

## SFX II Studio Standard

SCANFLEX II Designer Studio Base

- SFX II CUBE Controller - Speedgrade A incl. 2 x multi-bus connections (JTAG, SWD, etc.)
- goJTAG Demo Board
- CASCON GALAXY Development Station Standard / SX
- licence via USB dongle
- software maintenance contract for one year (SMC)



Item no. SHB-041

## SFX II Studio Comfort

SCANFLEX II Designer Studio Standard Comfort

- SFX II CUBE Controller - Speedgrade A incl. 4 x multi-bus connections (JTAG, SWD, etc.)
- goJTAG Demo Board
- CASCON GALAXY Development Station Standard / SX
- layout Data Import (1 format) and visualisation
- licence via USB dongle
- software maintenance contract for one year (SMC)



Item no. SHB-042

## JULIET

## JULIET Series 3



Compact Embedded JTAG Solutions tester as a desktop system. Suitable for development and production, with integrated system electronics. Controlled from an external PC or laptop via USB 3.0 or Gbit LAN.

## Mechanics

- compact, portable desktop model
- solid mechanics with manual loading and unloading
- Bed of nails as interchangeable cassette
- two-sided adaptation to test points and plug connectors
- LED display for test results
- controlled via operator panel on the device
- extended access protection
- access to all test resources via front interface during testing
- Tester Link Software
- online PASS / FAIL statistics
- optional MES interface

## Tester interface

- 4 power supplies (internal / external)
- 4 test access ports (TAP) up to 50 MHz
- 192 mixed signal I/O channels
- 16 differential channels with IEEE1149.6 support
- 8 electrically isolated inputs / 8 electrically isolated outputs
- 32 Multi Purpose Ports (MPP)
- 32 ADC channels / 16 DAC channels
- 8 RS232 interfaces / 84 RS485 interfaces
- adapter coding 7 bit / I<sup>2</sup>C EEPROM
- cover monitoring
- power management
- 4 controllable power rails
- internal fixed voltages of 3.5 V, 5 V and 12 V
- current / voltage measurement for up to 4 UUTs
- discharge function
- external sense support
- current monitoring and shutdown

## SCANFLEX II hardware

- SFX II CUBE-B
- SFX II TIC020 / LX (x4)

## PCB handling

- max. board dimensions: 340 mm x 230 mm
- max. number of pins: 600 (1N)

## Configuration overview · JULIET Series 3

	JULIET Series 3/RTS	JULIET Series 3/FDS	JULIET Series 3/DRS
item number	JLT-040	JLT-041	JLT-042
JTAG chains	4 (max. 50 MHz)	4 (max. 50 MHz)	4 (max. 50 MHz)
software	Test Station run-time	Test station failure diagnostic	Test station failure diagnostic & repair
I/O channels	192 - Mixed Signal	192 - Mixed Signal	192 - Mixed Signal
ADC channels	32	32	32
VarioTAP/ChipVORX/JEDOS support	yes - full	yes - full	yes - full
PC connection	USB 2.0 or Gbit Ethernet	USB 2.0 or Gbit Ethernet	USB 2.0 or Gbit Ethernet
data processing	fast - SPACE™ II architecture	fast - SPACE™ II architecture	fast - SPACE™ II architecture
power supply (internal/external)	4	4	4

## JULIET accessories

## JULIET / Fixture Set



Original adapter including hold-down panel, pin support, moving plate, sleeve protector plate, hold-down device, board rests and interface labels.

---

Item no. JLT-000

---

## JULIET / Barcode Reader Type A



Manual barcode reader for 1D codes (Datalogic Gryphon GD4130-BK), others available on request.

---

Item no. JLT-003

---

## JULIET / Barcode Reader Type B

Manual barcode reader for 2D codes (Honeywell Xenon 1900GSR-2), others available on request.



---

Item no. JLT-102

---

## JULIET / Self-testing fixture



Self-testing adapter with active self-testing electronics, including adapter box. Can also be used with restrictions for JULIET Series 2.

---

Item no. JLT-004

---

## JULIET / Universal Fixture



Self-testing adapter with active self-testing electronics, including adapter box. Can also be used with restrictions for JULIET Series 2.

Item no. JLT-005

## JULIET / Toolset



Tool kit for JULIET, including CION module and wearing parts package.

Item no. JLT-009

## JULIET / Cover Lift



Pneumatic cylinder for automatically opening the cover once the test procedure is finished. (This option serves exclusively for opening the cover and cannot be retrofitted.)

Item no. JLT-100

## JULIET / Cover Lock



Pneumatic cylinder for automatically locking the cover during the test procedure. (This option cannot be retrofitted and serves exclusively to protect the test system and the assembly. Not suitable as a safety lock.)

Item no. JLT-101

## BARCUDA VP230



Embedded JTAG tester for 16 assemblies

- 19 inch rack with slide-in modules and VPC interface
- 12 U rack from Schroff with VPC Gemini Interface 12
- Industrial PC desktop version
- TFT Monitor 21.5 Zoll

### Tester software

- CASCON Galaxy-TS Failure Diagnostic Edition (FDE)
- Tester Link Software for Embedded JTAG Solutions
- Software Maintenance Contract (SMC)

### Tester hardware

- SXF/PCIe 1149-B
- SFX/VPC-TAP16/M1
- SFX/VPC-MPP/M1
- SFX/VPC-PWR16/M1
- SFX/VPC-TPC128
- SFX/VPC-AMC128

Art.-Nr. BCD-100

## RAPIDO

### RPS910-S16



In-line programming station for 16 assemblies incl. in-line handler

- 17 VPC slots below / 6 VPC slots above
- belt module with automatic width adjustment from 60 to 250 mm
- IPC-SMEMA-9851 interface (other available on request)
- PC system
- touchscreen monitor
- in-built industrial PC
- power supply
- uninterrupted power supply (UPS) for the whole system
- 3-channel power supply unit for supplying assemblies and adapters
- 5 V / 24 V system voltage in the adapter
- SCANFLEX hardware
- SFX / PCI-1149-B Controller Card
- SFX / VPC transceiver card for 16 TAPs
- SFX / VPC multipurpose card with 128 channels
- SFX / VPC power card for supplying up to 16 assemblies
- PCB handling
- board dimensions: 60 x 60 mm to 400 x 250 mm
- max. height of the components – top: 60 mm, underside: 20 mm
- max. PCB weight: 1500 g
- max. number of pins: 900 (above and below)

Item no. RPD-130

## RAPIDO / S16PLUS



Upgrade kit for additional 16 assemblies for testing and programming. Complete set with controller, transceiver, multipurpose (MPP), power card, SFT hardware and software licences, incl. installation for new machines.

Item no. RPD-001

## RAPIDO / Barcode Reader Type A

System-integrated barcode reader for 2D labels (Microscan MicroHAWK ID-30), others available on request.



Item no. RPD-004

## RAPIDO SFT

Interchangeable self-testing adapter for all RAPIDO models with active self-testing electronics and FID (recommended).



Item no. RPD-005

## FID (TOP or BOTTOM)



Fixture Identification and Data module (FID) for lower and upper adapters. Intelligent counter module with project-specific data storage, maintenance history and output for maintenance requests, including FID configuration software

Item no. RPD-009/010

## Integration packages

### Acculogic

#### ATE integration for Acculogic Flying Probe



ATE integration packages advanced for Acculogic Flying Probe

Item no. IP-ACxxx-x

## ATE integration for VIAVI MDA/ICT/FKT



ATE integration packages for VIAVI 42xx / 52xx and 58xx

Item no. IP-Vlx-x

## digitaltest

## ATE integration for digitaltest Condor Flying Probe



ATE integration packages for digitaltest MTS500 / MTS505 Condor

Item no. IP-DTPxx-x

## ATE integration for digitaltest ICT Entry / Vacuum / Cable



ATE integration package Base for digitaltest MTS30 / MTS180 / MTS300 / MTS888 / Sprint

Item no. IP-DTxxx-x

## Dr. Eschke

## ATE integration for Dr. Eschke



ATE integration package for Dr. Eschke CT300 / CT350

Item no. IP-DR3xx-x

## Eiger Design

## ATE integration for Eiger Design



ATE integration package for Eiger Design J-tester

Item no. IP-EDJxx-x

## Keysight

## ATE integration for Keysight 3070 ICT



ATE integration packages for Keysight HP3070 / 3070 / i3070 / i5000/ Utility Card / Slot / Performance Port

Item no. IP-KExxx-x

## LXinstruments

## ATE integration for LXinstruments FCT



ATE integration package for LXinstruments function tester

Item no. IP-LIx xx-x

## Polar Instruments

## ATE integration for Polar Instruments



ATE integration package for Polar Instruments (GRS500) / GRS550

Item no. IP-PI5xx-x

Reinhardt

## ATE integration for Reinhardt

**REINHARDT**  
System- und Messelectronic GmbH

ATE integration package for Reinhardt ATS-(U)KMFT

Item no. IP-RHAXx-1

Rohde &amp; Schwarz

## ATE integration for Rohde &amp; Schwarz TSVP

**ROHDE & SCHWARZ**

ATE integration package for Rohde &amp; Schwarz TSVP

Item no. IP-RSTxx-1

Seica

## ATE integration for Seica Flying Probe

**Seica**

ATE integration for Seica Pilot H4 / L4 / M4 / V8

Item no. IP-SECxx-1

## ATE integration for Seica ICT

**Seica**

ATE integration Base for Seica Compact SL / TK / Multi

Item no. IP-SECxx-1

## SPEA

## ATE integration for SPEA ICT



ATE integration for SPEA 3030 ICT

Item no IP-SP3xx-x

## ATE integration for SPEA Flying Probe



ATE integration for SPEA Flying Prober 4020 / 4040 / 4050 / 4060 / 4080

Item no IP-SPxxx-x

## Takaya

## ATE integration for Takaya APT - Flying Probe



ATE integration for Takaya APT94xx / 96xx / 1400F



Item no. IP-TKxxx-x

## Teradyne

## ATE integration for Teradyne Spectrum ICT



ATE integration package for Teradyne Spectrum / 88xx / TSSE

Item no. IP-TD8xx-x

## ATE integration for Teradyne Teststation ICT



ATE integration package for Teradyne Teststation TS / 12x / TSLH / TSLX / TSI052 / GR228x

Item no. IP-TD8xx-x

TEST-OK

## ATE integration for TEST-OK



ATE integration package for TEST-OK UCM Expansion Board

Item no. IP-TOKxx-1

TRI

## ATE integration for TRI TR5001



ATE integration package for TRI TR5001

Item no. IP-TR5xx-x

Demo kit

## SYSTEM CASCON Demo kit



Complete tool kit

- Boundary Scan Controller PicoTAP
- USB cable
- goJTAG Demo Board
- CASCON GALAXY Advanced Edition, restricted to use with the goJTAG Demo Board included
- compatible with Windows 7 / 8.x / 10 (32 / 64 bit)
- USB dongle

Item no. TAS-011

## Accessories

### VPC modules

#### SFX / VPC-MPP / M1



Fixture SCANFLEX digital I/O module for gang applications

- Mass interconnect interface for 128 MPP (Multi Purpose Port) signals (16 groups x 8 MPP signals) to support 16 TAPs
- each channel can be configured independently (input, output, bi-directional)
- I/O voltage can be programmed in 16 groups, each with 8 channels (1.8-4.5 V)
- driver capability of the channels +/- 24 mA
- use as generic I/Os, test channels, PIP replacement and as control lines in the AFPG (FLASH)
- each signal has a 22Ω in-line resistor

Item no. RPD-720

#### SFX / VPC-TPC128



SCANFLEX Test Pattern Card

- 128 I/O channels (16 groups of 8 I/O signals each for up to 16 UUTs)
- 8 additional PIO channels
- VPC interface with 192 Pin Receiver from Virginia Panel (P/N 510150152)
- control via Gigabit LAN and web interface
- no driver installation required

Item no. RPD-721

#### SFX / VPC-PWR16-M1



Fixture SCANFLEX power control for gang applications

- Mass interconnect interface with support for eight UUTs with four (8 x 4) voltages or 16 UUTs with two (16 x 2) voltages
- based on the 192-pin receiver from Virginia Panel (P/N 510150152)
- voltage range max. +/-20 V with 2A based on mass (for each voltage of a UUT)
- arranged in a 2 x 2 x 8 matrix (8 times 2 relays, each with 2 voltages, one relay therefore always switching 2 voltages)
- measurement of the input voltages
- excess current detection and automatic shutdown possible on every UUT
- output voltages are defined by external power supply
- controlled via SFX/LS power bus when using an SFX/VPC-TAP16/M1
- controlled via USB (mini USB socket) when using other SFX transceivers
- external power supply required

Item no. RPD-740

### CION ICs & accessories

#### CION



Configurable PIO module

- with extended IEEE1149.1 architecture
- 4 operating modes (Boundary Scan, PIO, PXI, driver)
- 32 single-ended (SE) Boundary Scan test channels in 4 x 8-bit ports; I/O voltage per port: 1.8-5.0 V; driver capability of the channels: +/-24mA

Item no. 331-001

## CION-LX



### Configurable PIO module

- 11 operating modes (Boundary Scan, PIO, PXI, driver)
- 32 single-ended (SE) Boundary Scan test channels in 4 x 8-bit ports; I/O voltage per port: 0.9-3.6 V; driver capability of the channels: +/- 24 mA
- 4 high-current (HC) Boundary Scan test channels in 1 x 4-bit port; I/O voltage: 0.9-2.0 V; driver capability of the channels: +/- 40 mA
- 8 differential (DE) Boundary Scan test channels in 1 x 8-bit group; LVDS or CML; with full support for IEEE1149.6
- each channel can be configured independently (input, output, bidirectional) and supports the unstress function
- simultaneous driving and measurement of all I/Os
- maximum TCK frequency: 100 MHz
- extended test resources at the I/O pins:
  - 12-bit ADC + 1k RAM (signal recorder) at SE and HC pins
  - 10-bit DAC + 1k RAM (arbitrary waveform generator) at SE and HC pins
  - event detector at all pins
  - frequency meter at all pins
  - connectable pull-up and pull-down resistors (each 10k) at SE and HC pins
  - setting for the drive strength at SE and HC pins
- 116-pin LGA housing 11 mm x 11 mm

Item no. CLX-001

## Boundary Scan Probe



### Logic tester

- JTAG / Boundary Scan (TAP) Interface
- JTAG / Boundary Scan Signal Emulation
- with Drive / Sense – electronics
- spot lighting
- toggle function
- status LED

Item no. 312-000

## Board grabber & accessories

### SFX / Board Grabber-L



- total size: 470 x 505 x 160 mm
- frame size: 400 x 300 mm
- for a PCB size of up to 285 x 235 x 4 mm when the rails are used vertically
- for a PCB size of up to 335 x 185 x 4 mm when the rails are used horizontally

Item no. SUF-010

### SFX / Board Grabber-XL



- total size: 570 x 605 x 160 mm
- frame size: 500 x 400 mm
- for a PCB size of up to 385 x 335 x 4 mm when the rails are used vertically
- for a PCB size of up to 435 x 285 x 4 mm when the rails are used horizontally

Item no. SUF-020

## SFX / Board Grabber-XXL



- total size: 670 x 705 x 160 mm
- frame size: 600 x 500 mm
- for a PCB size of up to 485 x 435 x 4 mm when the rails are used vertically
- for a PCB size of up to 535 x 385 x 4 mm when the rails are used horizontally

Item no. SUF-030

## BG-Nail Probe / RA

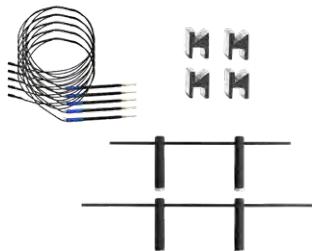


For all SFX / Board Grabber

- 1 rectangular pin (black colour) with 0.5 m cable and with magnetic feet (stand-alone)

Item no. SUF-000

## BG-Access Kit / 5

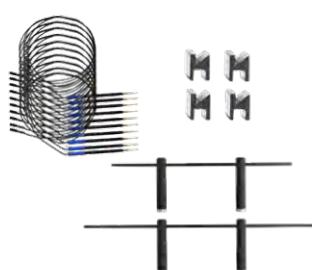


BG-Access Kit / 5 for board grabbers

- 5 pins (each with a different colour)
- 550 mm cable
- includes 2 rails
- 4 board holders

Item no. SUF-001

## BG-Access Kit / 10



BG-Access Kit / 10 for board grabbers

- 10 pins (5 black and 5 in various colours)
- 550 mm cable
- includes 2 rails
- 4 board holders

Item no. SUF-002

## BG-Nail Holders

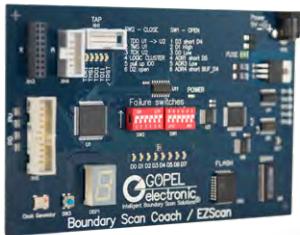


BG-Nail Holders

- BG / Nail Holders for board grabber
- rails and magnetic holders for additional pins

Item no. SUF-003

## Boundary Scan Coach / EZScan



Simple training board for mastering Boundary Scan technology

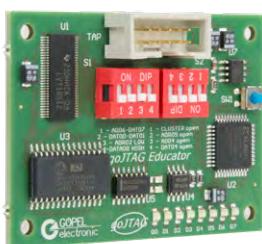
- 2 Boundary Scan ICs (CPLD)
- Fault switch
- LED
- Buffer
- Logic
- RAM
- Flash

---

Item no. 325-001

---

## GoJTAG Demo Board



Simple training board for getting started with Boundary Scan technology

- 2 Boundary Scan ICs (CPLD)
- Fault switch
- Push button
- Serial Flash
- RAM
- LED

---

Item no. TAS-003

---

## ESA Coach



Complex "Embedded System Access (ESA)" training board for JTAG / Boundary Scan, VarioTAP and ChipVORX applications

- Atmel AT91SAM9G45 MCU (ARM)
- Xilinx FPGA
- I2C flash
- NOR and NAND flash
- SD-DDR2 RAM
- graphic display
- analogue potentiometer
- digital I/Os

---

Item no. TAS-004

---

## Integra V1



Reference board for demonstrating and qualifying JTAG / Boundary Scan integrations in ICT / MDA / FCT / FPT

- Boundary Scan modules (FPGA, CPLD)
- Non-Boundary Scan modules (flash, RAM, display, ADC, DAC, LED, reverser)
- additional test points are available on both sides for pin access, enabling a combination of Boundary Scan and ICT / MDA / FPT operations
- simulation of production faults using fault switch
- G-TAP support
- dimensions: 160 x 100 mm

---

Item no. TAS-005

---

## Software

### CASCON GALAXY-DS Base Edition



JTAG/Boundary Scan software package with tools for

- Test Program Generation
  - ATPG Infrastructure Test
  - ATPG Interconnection Test 1149.1
  - Basic Test Generation
  - TP Generation 1149.4
  - Data Import Processor
- Data Analyzing, Visualisation and Debugging
  - Design and Testability Explorer
  - Netlist Merger
  - Advanced Vector Browser
  - ScanAssist Multi Mode Debugger
  - ScanAssist Interactive Pin Toggler
- Pin Failure Diagnostic Tools (PFD)
  - PFD Infrastructure
  - PFD Interconnection 1149.1 und 1149.6
  - Universal Pin Failure Detection
  - Failure Diagnostics 1149.4
- SYSTEM CASCON Platform Module
  - Test / ISP (Batch) Execution
  - SX Upgrade / TAP Limit
  - VarioCore Handler
  - Hybrid Vector Splitter
  - SX-Upgrade / Scan Router Handler
  - Multi User Manager
  - Floating Licence Manager
  - Automated Process Scripting
  - CASCON Device Library
  - CASCON Full Platform License

---

Item no. 211-001

---

### CASCON GALAXY-DS Standard Edition



JTAG/Boundary Scan software package with tools for

- Test Program Generation
  - ATPG Infrastructure Test
  - ATPG Interconnection Test 1149.1
  - ATPG Memory Access
  - ATPG Device Model
  - Basic Test Generation
  - TP Generation 1149.4
- In-System Programming
  - Basic Flash-Programming
  - Automated Flash Programming (AFPG)
  - PLD Program Generator
  - Data Import Processor
- Pin Failure Diagnostics Tools (PFD)
  - PFD Infrastructure
  - PFD Interconnection 1149.1 und 1149.6
  - PFD Memory Access
  - Universal Pin Failure Detection
  - Failure Diagnostics 1149.4
- SYSTEM CASCON Platform Module
  - SX Upgrade / TAP Limit
  - VarioCore Handler
  - Multi User Manager
  - Floating Licence Manager
  - CASCON Device Library

---

Item no. 224-001

---

## CASCON GALAXY-DS Classic Edition



JTAG/Boundary Scan software package with tools for

- Test Program Generation
  - ATPG Infrastructure Test
  - ATPG Interconnection Test 1149.1, 1149.6
  - ATPG Clusters (True Table)
  - ATPG Clusters (Waveform)
  - ATPG Memory Access
  - ATPG Logic Components
  - ATPG Device Model
  - Basic Test Generation
  - TP Generation 1149.4
  - Basic VarioTAP Test Generation
- In-System Programming
  - Basic Flash Programming
  - Automated Flash Programming (AFPG)
  - Automated VarioTAP Flash ISP
  - PLD Programm Generator
  - Data Import Processor
- Data Analyzing, Visualisation and Debugging
  - Netlist Merger
  - Test Coverage Analyser
  - Scan Vision III Layout Reader
  - Scan Vision III Layout
  - Advanced Vector Browser
  - Scan Assist Multi Mode Debugger
  - Scan Assist Interactive Pin Toggler
- Pin Failure Diagnostic Tools (PFD)
  - PFD Infrastructure
  - PFD Interconnection 1149.1 und 1149.6
  - PFD Memory Access
  - PFD Logic Components
  - PFD Clusters (Truth Table)
  - Universal Pin Failure Detection
- SYSTEM CASCON Platform Module
  - SX Upgrade / Multi TAP (>2)
  - SX Upgrade / Scan Router Handler
  - SX Upgrade / Scan Gang Handler
  - Multi User Manager (myCASCON)
  - Floating Licence Manager
- Demo Board

---

Item no. 223-001

---

## CASCON GALAXY-DS Advanced Edition



JTAG/Boundary Scan software package with tools for

- Program Generation
  - ATPG Infrastructure Test
  - ATPG Interconnection Test 1149.1, 1149.6
  - ATPG Clusters (True Table)
  - ATPG Clusters (Waveform)
  - ATPG Memory Access
  - ATPG Logic Components
  - ATPG Device Model
  - Basic Test Generation
  - TP Generation 1149.4
  - AVTG Dynamic Memory Access
  - Basic VarioTAP Test Generation
  - ATPG Flying Probe
- In-System Programming
  - Basic Flash Programming
  - Automated Flash Programming (AFPG)
  - Automated VarioTAP Flash Programming
  - Automated VarioTAP Flash Programming
  - PLD Program Generator

- Data import Processor Data Analyzing, Visualisation and Debugging
  - Netlist Merger
  - Test Coverage Analyzer
  - Scan Vision III Layout Reader
  - Scan Vision III Layout
  - Advanced Vector Browser
  - ScanAssist Multi Mode Debugger
  - ScanAssist Interactive Pin Toggler
- Pin Failure Diagnostic Tools (PFD)
  - PFD Infrastructure
  - PFD Interconnection 1149.1 und 1149.6
  - PFD Memory Access
  - PFD Logic Components
  - PFD Clusters (Truth Table)
  - PFD Flying Probe
  - Universal Pin Failure Detection
  - Failure Diagnostics 1149.4
- SYSTEM CASCON Platform Module
  - SX Upgrade / TAP Limit(>2)
  - VarioCore Handler
  - SX Upgrade / Scan Router Handler
  - SX Upgrade / Scan Gang Handler
  - Multi User Manager
  - Floating Licence Manager
  - CASCON Device Library
- Demo Board

---

Item no. 222-001

---

## CASCON GALAXY-TS Run Time Edition



JTAG/Boundary Scan software package with tools for

- Data Analyzing, Visualizing and Debugging
  - Advanced Vector Browser
- Pin Failure Diagnostic Tools (PFD)
  - PFD Infrastructure
  - Universal Pin Failure Detection
  - Failure Diagnostics 1149.4
- SYSTEM CASCON Platform Module
  - VarioCore Handler
  - Multi User Manager

---

Item no. 211-011

---

## CASCON GALAXY-TS Failure Diagnostic Edition

JTAG/Boundary Scan software package with tools for



- Data Analysis, Visualisation and Debugging
- Pin Failure Diagnostic Tools (PFD)
  - PFD Infrastructure
  - PFD Interconnection 1149.1 und 1149.6
  - PFD Memory Access
  - PFD Logic Components
  - PFD Clusters (Truth Table)
  - Universal Pin Failure Detection
  - Failure Diagnostics 1149.4
- SYSTEM CASCON Platform Module
  - SX Upgrade / TAP Limit (>2)
  - VarioCore Handler
  - SX Upgrade / Scan Router Handler
  - SX Upgrade / Scan Gang Handler
  - Multi User Manager
  - Floating Licence Manager

---

Item no. 225-011

---

---

## CASCON GALAXY-TS Diagnostic & Repair Edition



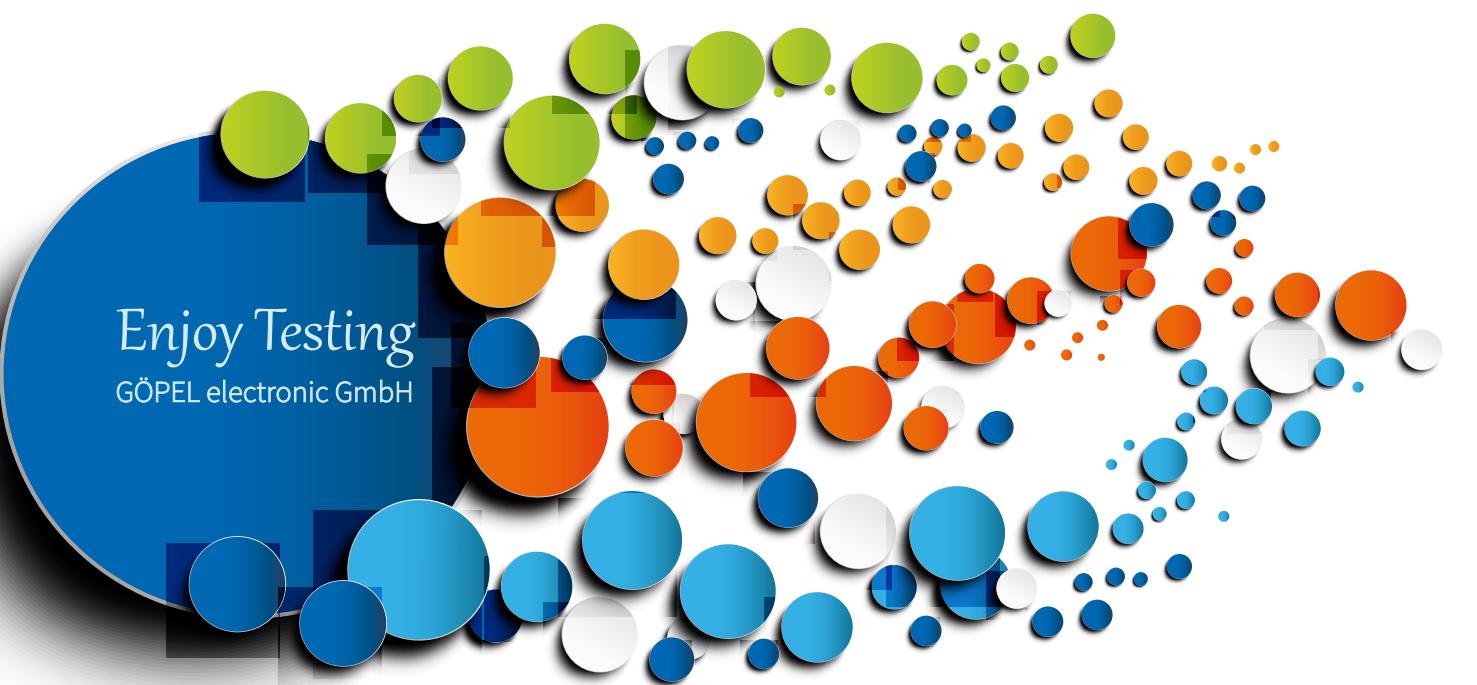
JTAG/Boundary Scan software package with tools for

- Data Analysis, Visualisation and Debugging
  - *Scan Vision III Layout*
  - *Advanced Vector Browser*
  - *ScanAssist Multi Mode Debugger*
  - *ScanAssist Interactive Pin Toggle*
- Pin Failure Diagnostic Tools (PFD)
  - *PFD Infrastructure*
  - *PFD Interconnection 1149.1 und 1149.6*
  - *PFD Memory Access*
  - *PFD Logic Components*
  - *PFD Clusters (Truth Table)*
  - *Universal Pin Failure Detection*
  - *Failure Diagnostics 1149.4*
- SYSTEM CASCON Platform Module
  - *SX Upgrade / TAP Limit (>2)*
  - *VarioCore Handler*
  - *SX Upgrade / Scan Router Handler*
  - *SX Upgrade / Scan Gang Handler*
  - *Multi User Manager*
  - *Floating Licence Manager*

---

Item no. 225-020

---



*Enjoy Testing*  
GÖPEL electronic GmbH



ISO 9001 certified

• GÖPEL electronic GmbH

Goeschwitzer Str. 58/60  
07745 Jena · Germany

+49 3641 · 68 96 0 Phone  
+49 3641 · 68 96 944 Fax

✉ ejs.sales@goepel.com  
[www.goepel.com](http://www.goepel.com)

 ejs.sales@goepel.co.uk

 ejs.sales@goepelusa.com

 ejs.sales@goepel.asia

 ejs.sales@goepel.in

