

SJTAG Since Last BTW



BTW 2006

2006 IEEE 5th International
Workshop on Board Test

Bradford G. Van Treuren – Chairman

Gunnar Carlsson – Vice Chairman

Ben Bennetts – Chairman Emeritus



Targets and Focus (10 Nov ITC Meeting)

Four main industries

- Telecoms
- Server/mass storage
- Mil/Aero
- Automotive

Need ways of describing:

- The nature of the Test Manager function: all external, all embedded, distributed
- The access and communication protocols
- Test flow control and data requirements for test, debug, diagnosis, configuration, etc

Issues:

- Security

Initial focus: telecoms, especially MicroTCA/ATCA but not exclusively.



Core Group (September 2006)

Change of Leadership

SJTAG Core Group

Brad Van Treuren, Lucent Technologies – Chair

Gunnar Carlsson, Ericsson – Vice Chair

Ben Bennetts, Bennetts Associates – Chair Emeritus

Anthony Sparks, JTAG Technologies

Bill Eklow, Cisco Systems

Ken Filliter, National Semiconductor

Steve Harrison, Motorola Networks

Peter Horwood, Firecron

Jim Webster, BAE Systems

Adam Ley, ASSET InterTech

**Scan Support Device Vendors
Test Manager Vendors
System Company End Users**



SJTAG Meeting at EBTW 2006

<http://www.dft.co.uk/SJTAG/>

Agenda for the SJTAG meeting at EBTW'06.

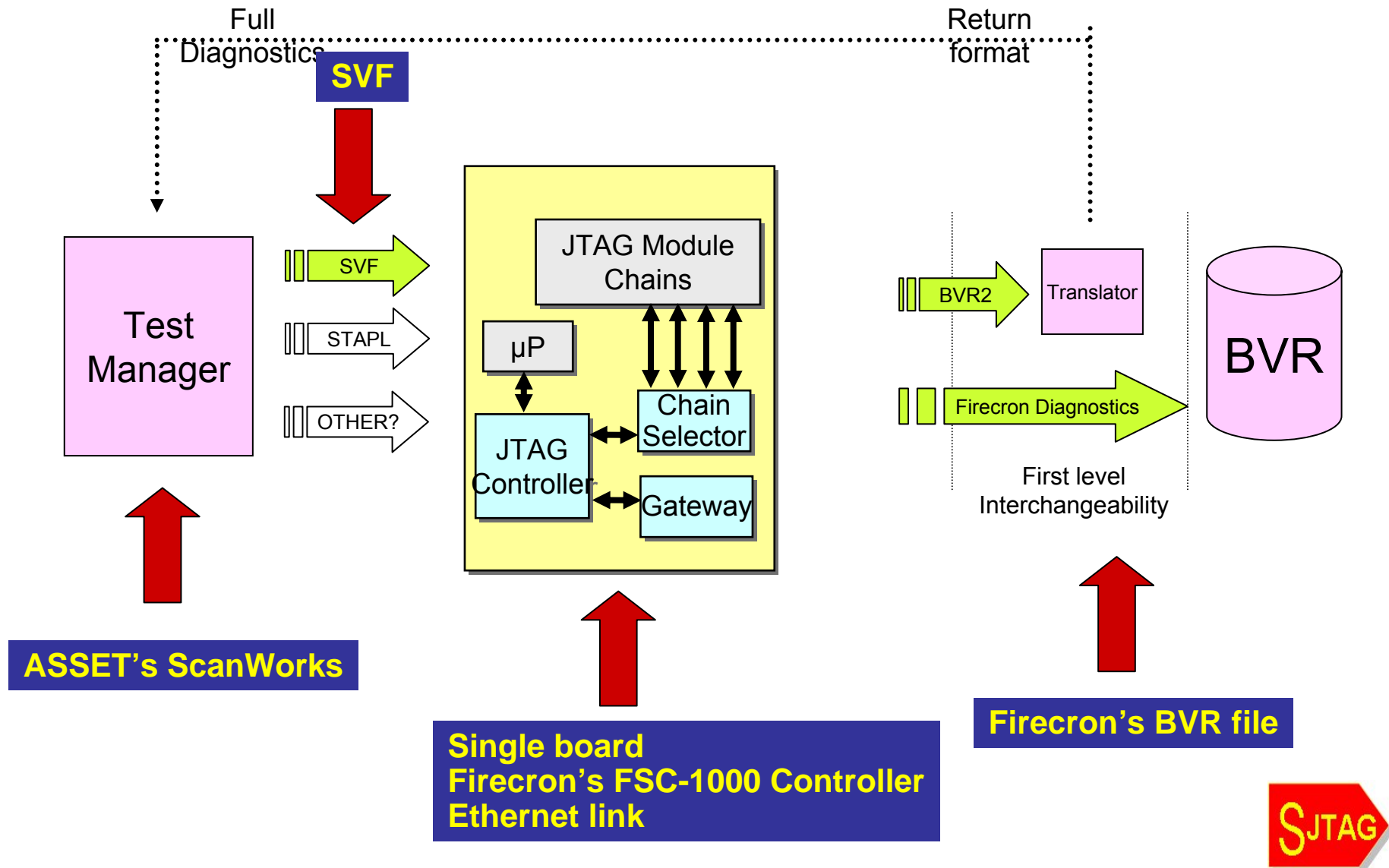
1. Ben Bennetts, SJTAG Chairman: Introduction and status of SJTAG.
2. Views from the industry
 - 2.1 Test manager vendors. Adam Ley, ASSET InterTech, USA
 - 2.2 Systems industry. Steve Harrison, Motorola, UK
 - 2.3 Scan support device vendors. Peter Horwood, Firecron, UK
3. Summary and wrap-up. Ben

Firecron will be demonstrating and initial proof-of-concept of SJTAG's ideas

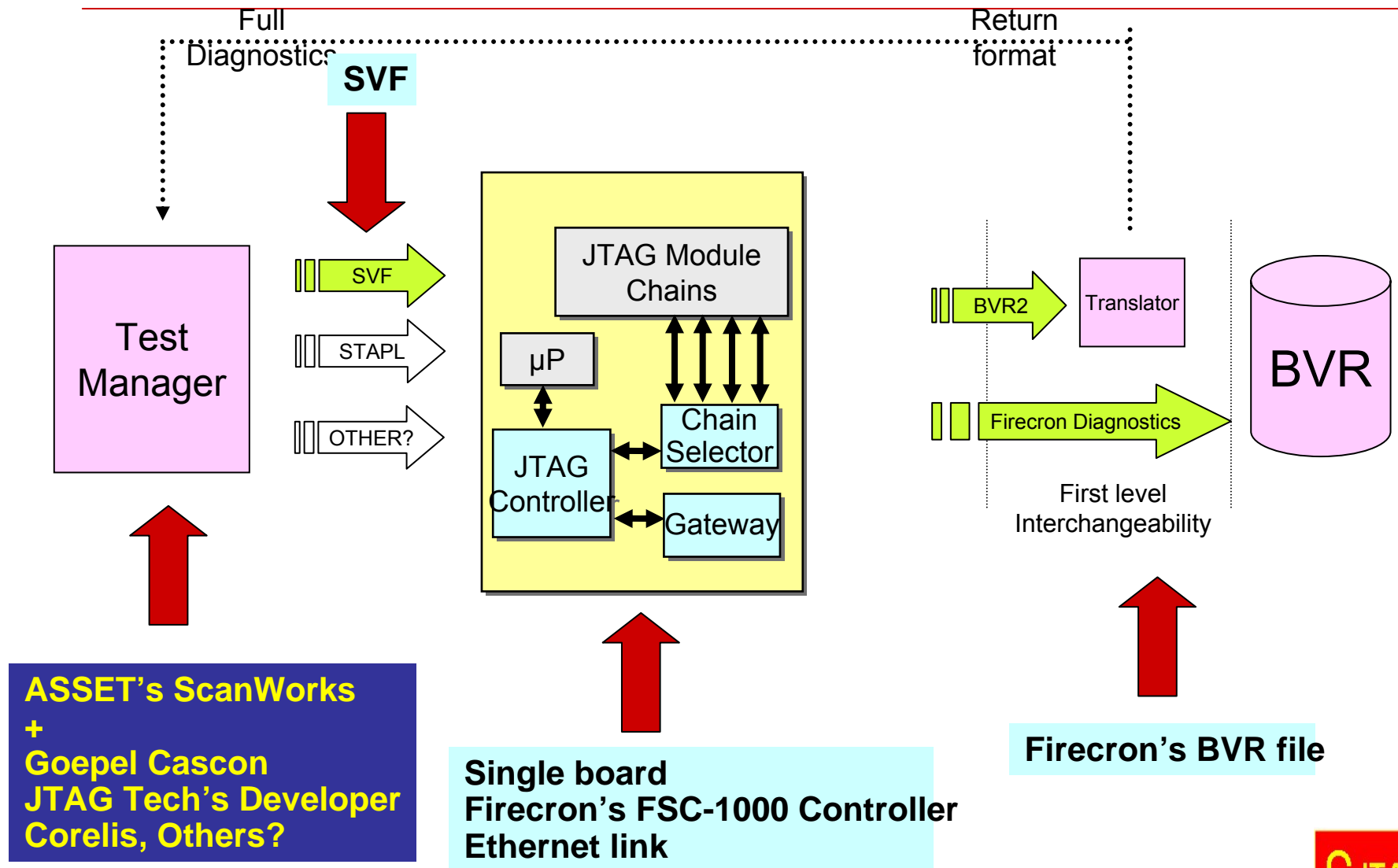
This live demo will show ASSET's ScanWorks product controlling the application of a variety of STAPL actions on a Firecron FSC1000 demo board. The board will allow remote test execution & diagnostics via a LAN or WAN interface. The demonstration will show delivery of the STAPL commands onto a local Firecron Digital I/O card (one that is next to the ScanWorks station) and onto a similar board that is remote (based on a link set up over the Internet).



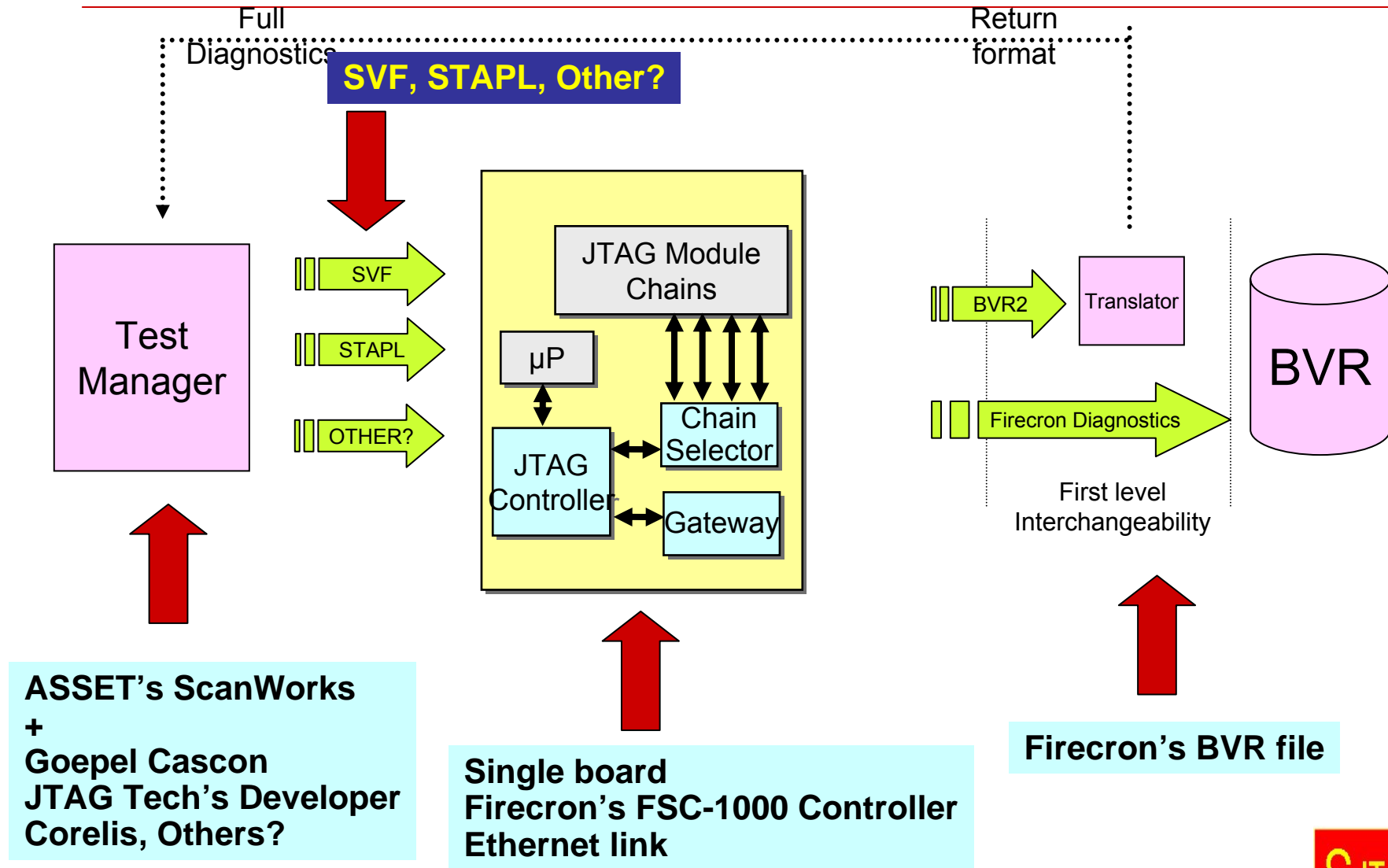
Demo 1: Shown at EBTW May 2006



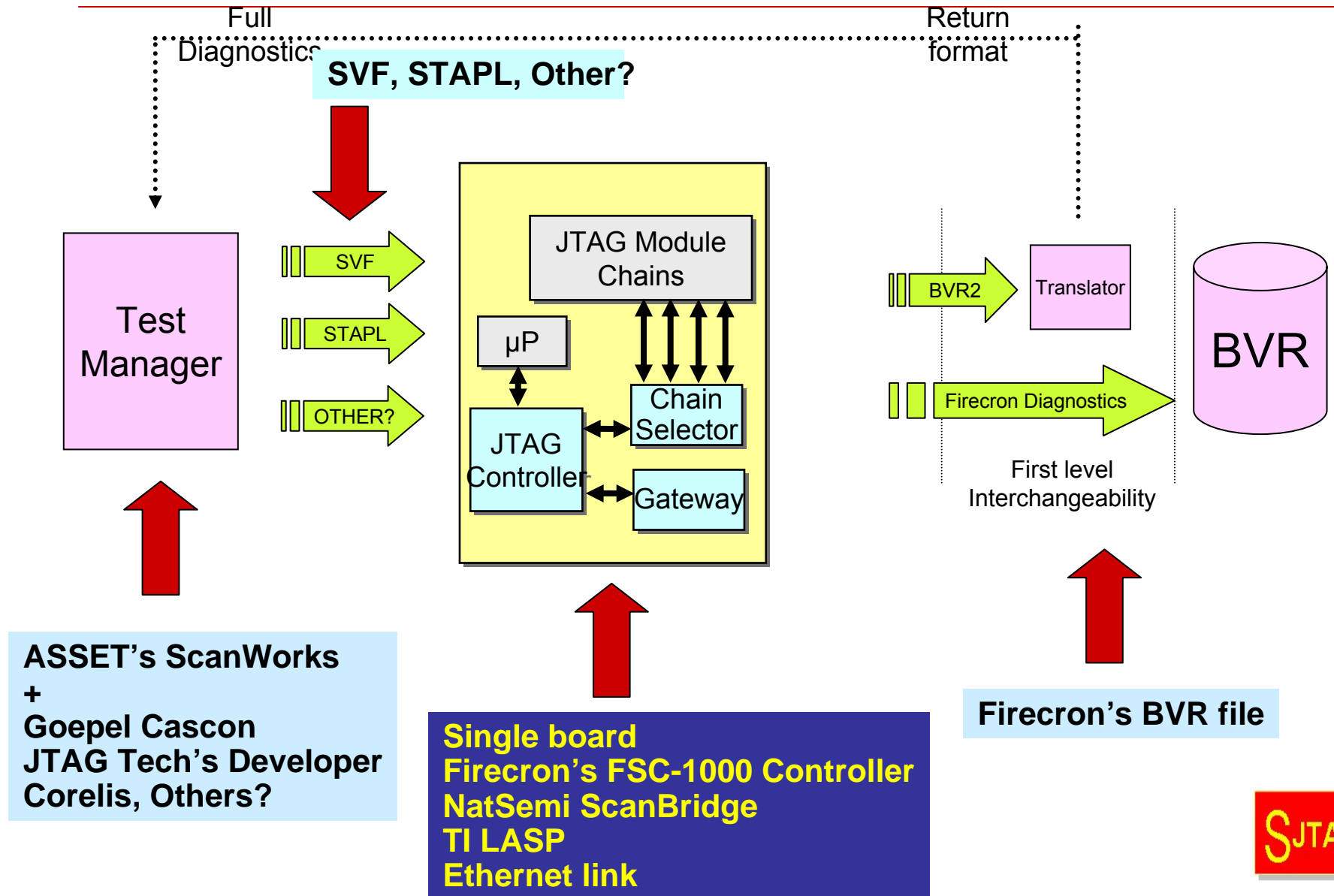
Building the Demos: Test Manager



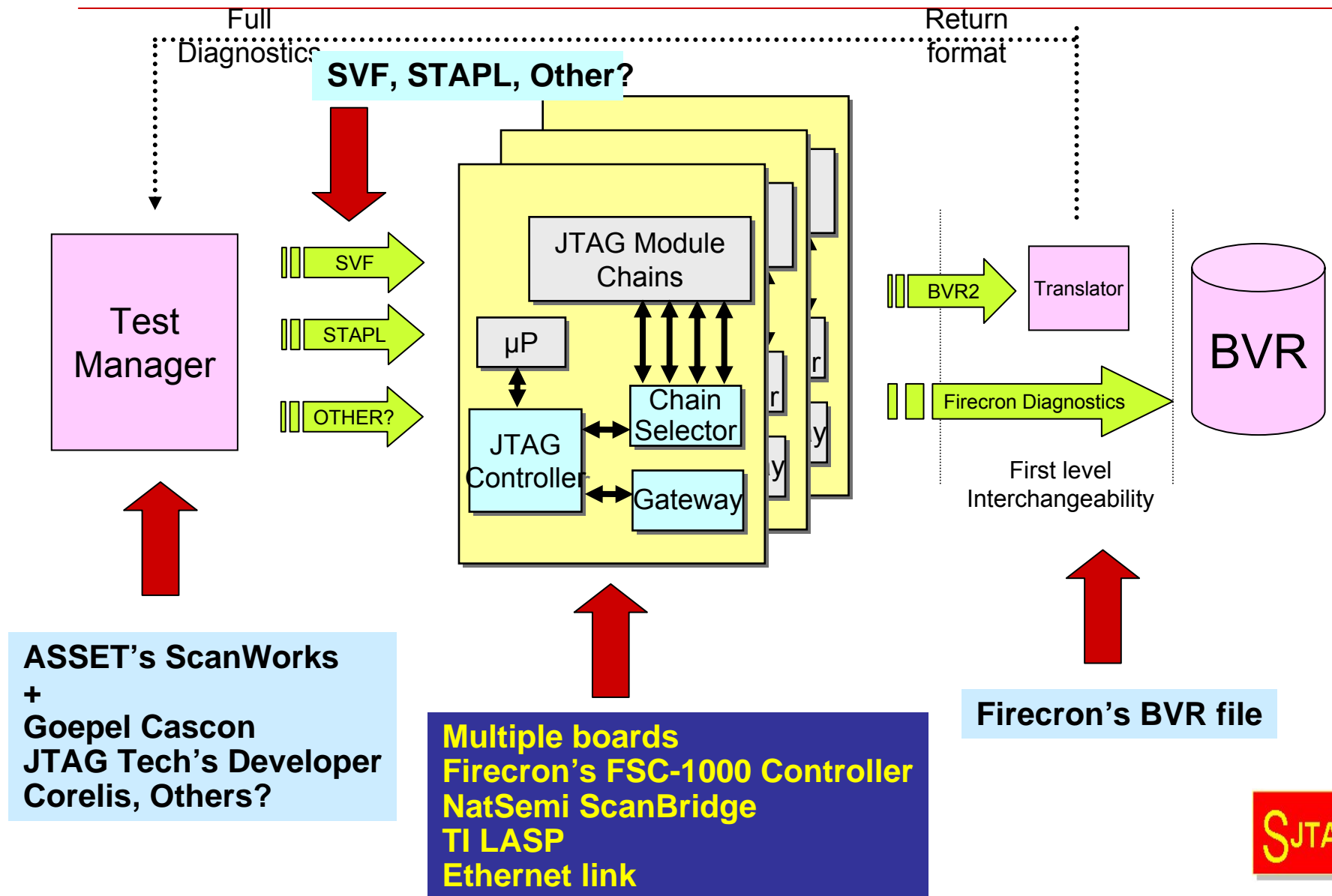
Building the Demos: Input Language



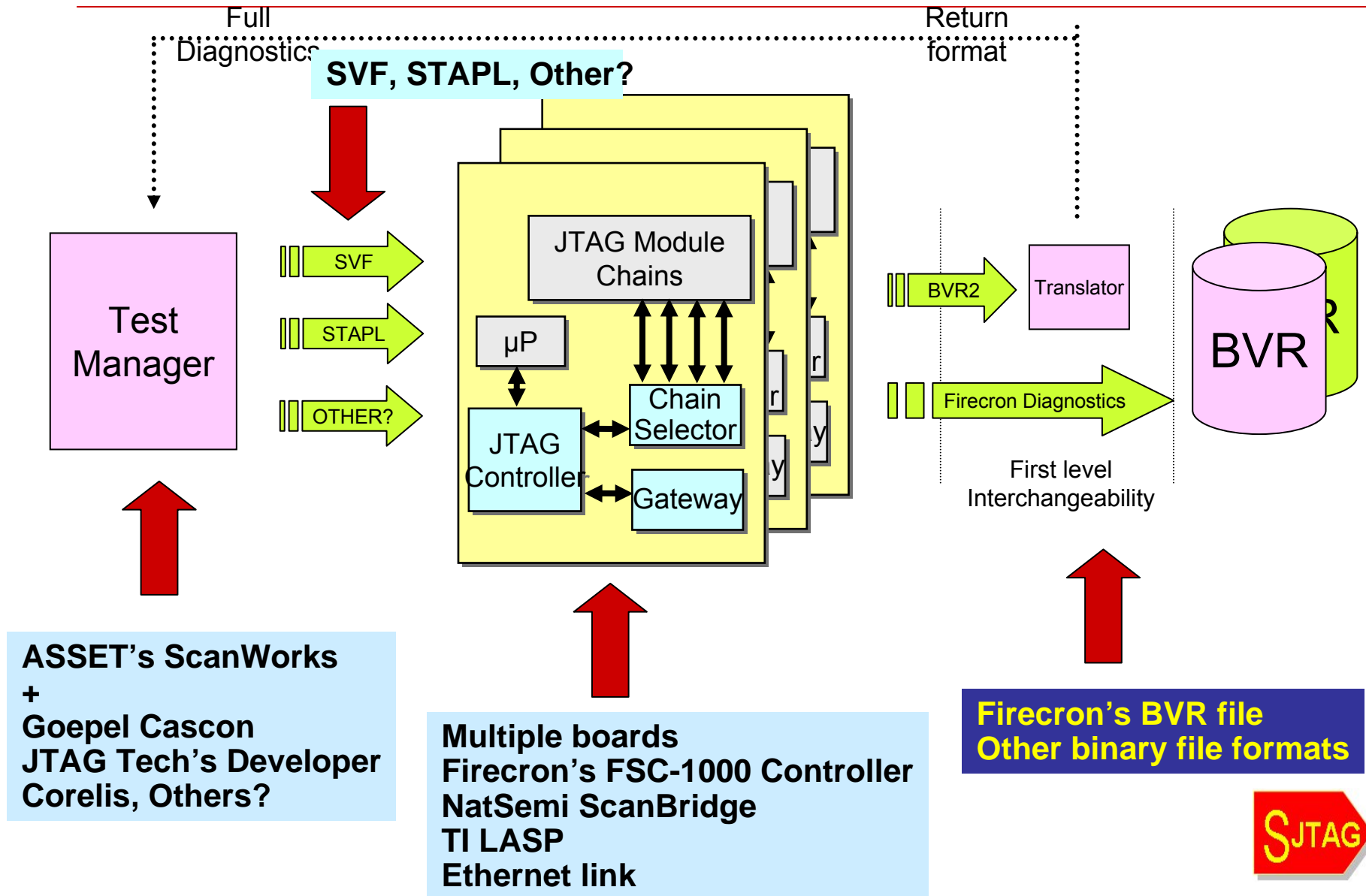
Building the Demos: JTAG Controller



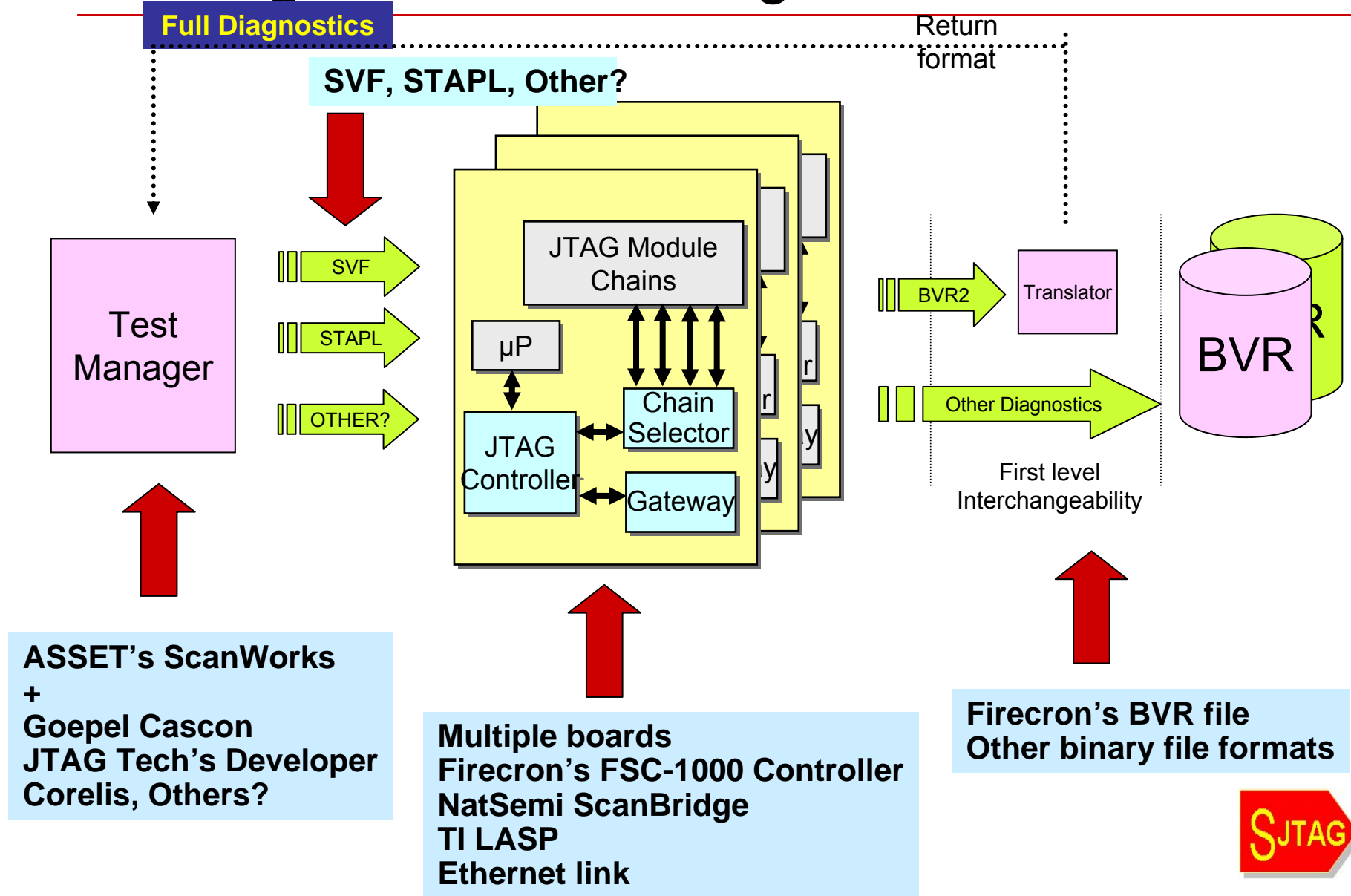
Building the Demos: Multiple Boards



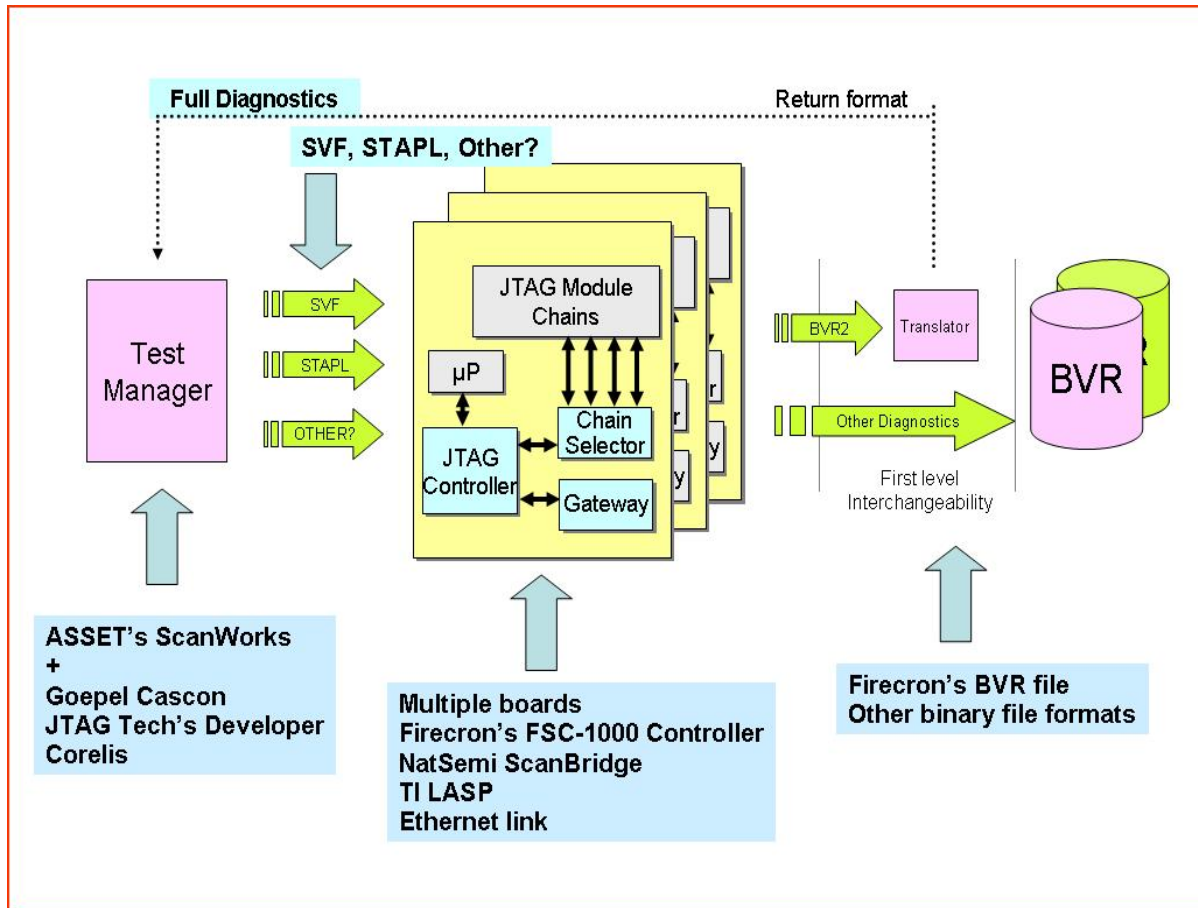
Building the Demos: Return Format



Building the Demos: Diagnostics



Adding Use Scenario Considerations



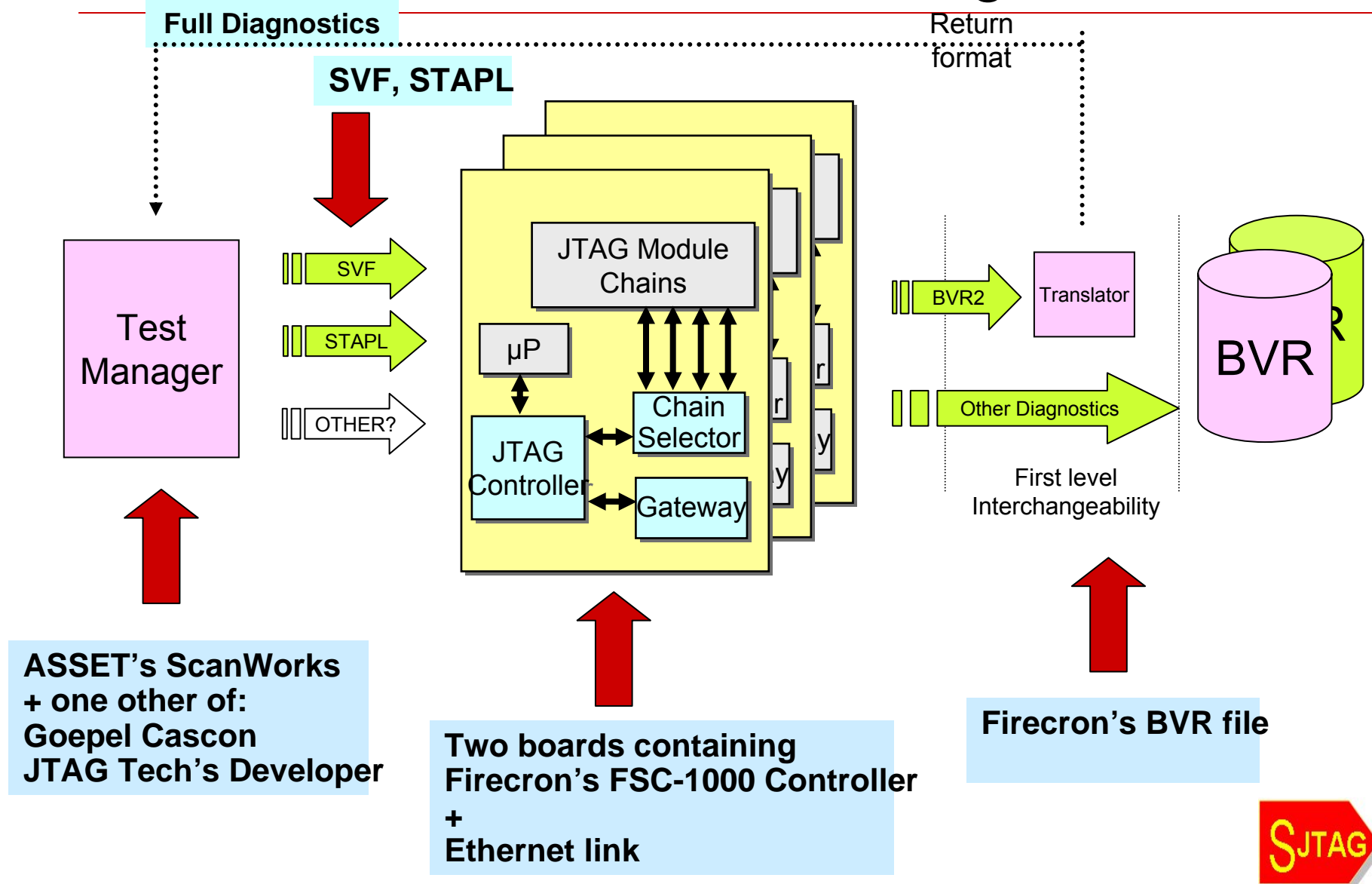
Prototype system debug.

Manufacturing test,
On-site customer installation.

In-service field-service calls.

Repair depots

Building the Demos: Future Target?



Action Items from EBTW '06 Meeting

Action Item	Name	Deliverable	Date
SJTAG Project Manager	Jim Webster	SJTAG Project Specification	ASAP
Vector/Sequence definition	Anthony Sparks		
Scan Chain definition	Steve Harrison		
Vector return definition	Adam Ley		
Net and component list definition	Jim Webster		
Physical Layer			
System configuration files			
System security			
SJTAG manager requirements			
Use scenarios	Gunnar Carlsson		
Diagnosis	Christophe Lotz		
Future demos	Ben Bennetts		



What's Next?

- Face to Face Meeting following Board Test Workshop, September 14 – 15, Fort Collins, CO
 - Demonstration of TFCL™ showing that embedded diagnostics is possible
 - Analysis of features of demonstrations to date
- Face to Face Meeting at ITC 2006, Oct. 22-26, Santa Clara, CA

