In the context of IP-XACT

Bertrand Blanc

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study realized as an outcome of DAC'08 exhibitions 

powered by 3B Consultancy

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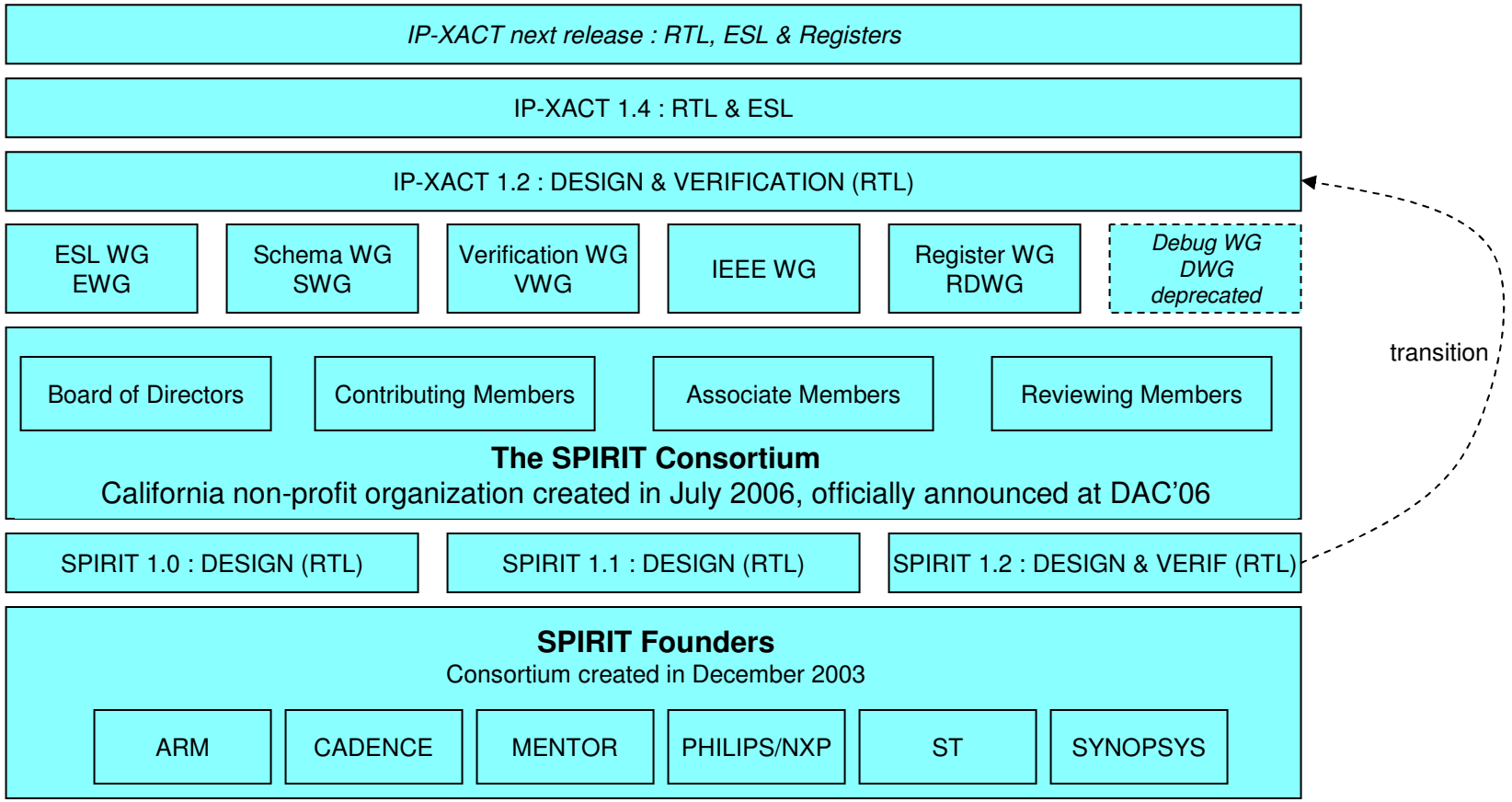
IP-XACT & The SPIRIT Consortium



The SPIRIT Consortium Members

The SPIRIT Consortium

- Board of Directors

- Contributing Members

- Associate Members

- Reviewing Members

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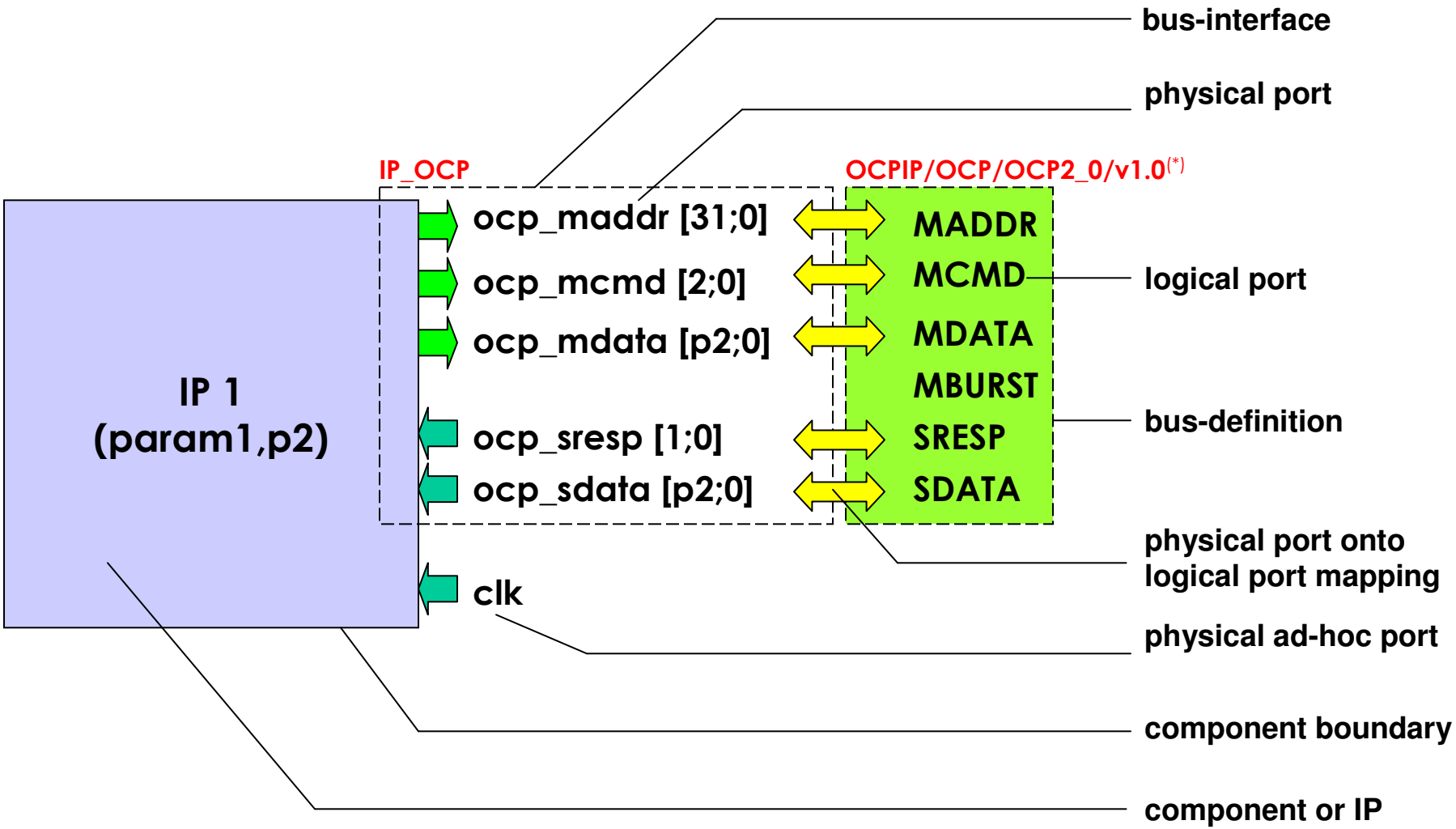
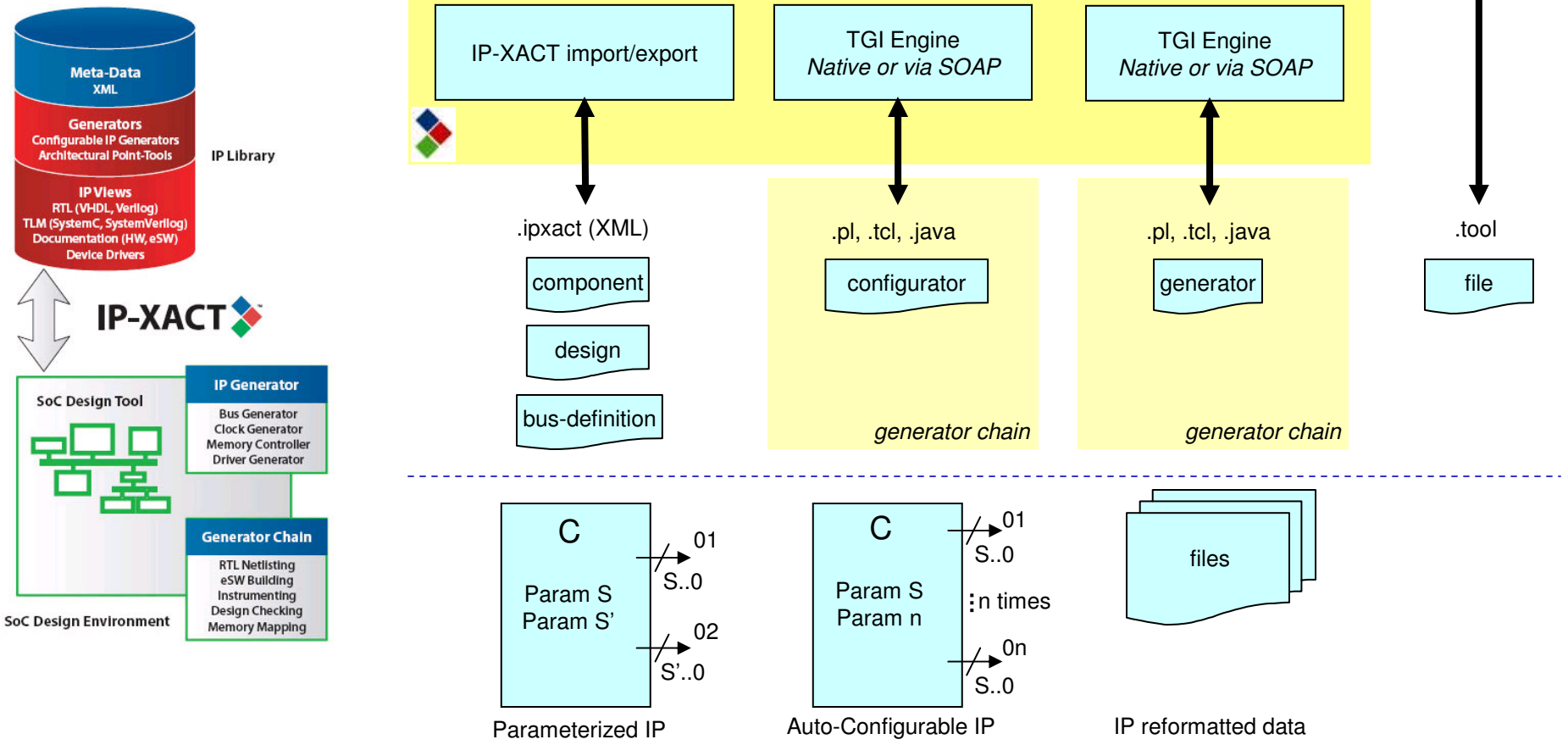
IP-XACT Basic Terminology



(*) **V**endor / **L**ibrary / **N**ame / **V**ersion

IP-XACT enabled Design Environment (DE)



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Generator Example using Native TGI library

Standard TGI Library in JAVA

```
// Get all the instances of the design
   println("\n\nDesign Component Instances : ");
   String[ ] compInsts = tgiCmd.getDesignComponentInstanceIDs(designID);
   if (compInsts != null) {
      for (int i=0; i<compInsts.length; i++) {
      // Get all the component instances of the design
      print("\nComponentInstance Name : ");
      print(tgiCmd.getComponentInstanceName(compInsts[i]));
      print("\nComponentInstance ComponentRef : ");
      print(tgiCmd.getComponentInstanceVLNV(compInsts[i]));
   }
}
```

Standard TGI Library in TCL

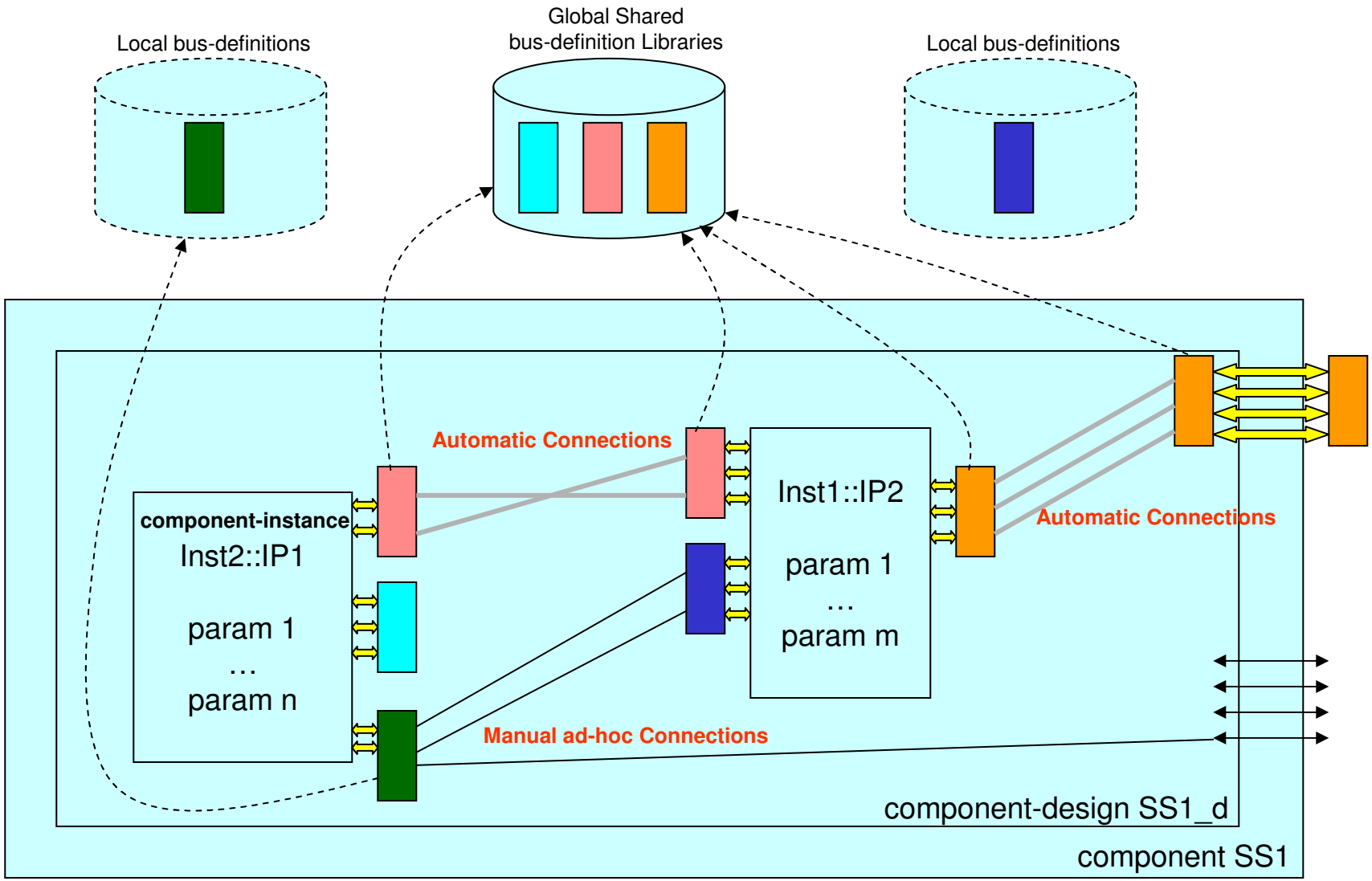
```
#collecting component port info and storing it
set portIDs [tgi::getComponentPortIDs $componentID]
foreach portID $portIDs {
   set ports($portID) [list [tgi::getPortName $portID] [tgi::getPortDirection $portID] [tgi::getPortRange $portID]]
}
```

Standard TGI Library in PYTHON

Standard TGI Library in PERL

...

Integration Automation in Component-Design



global bus-definitions target component-design correct-by-construction automatic connections

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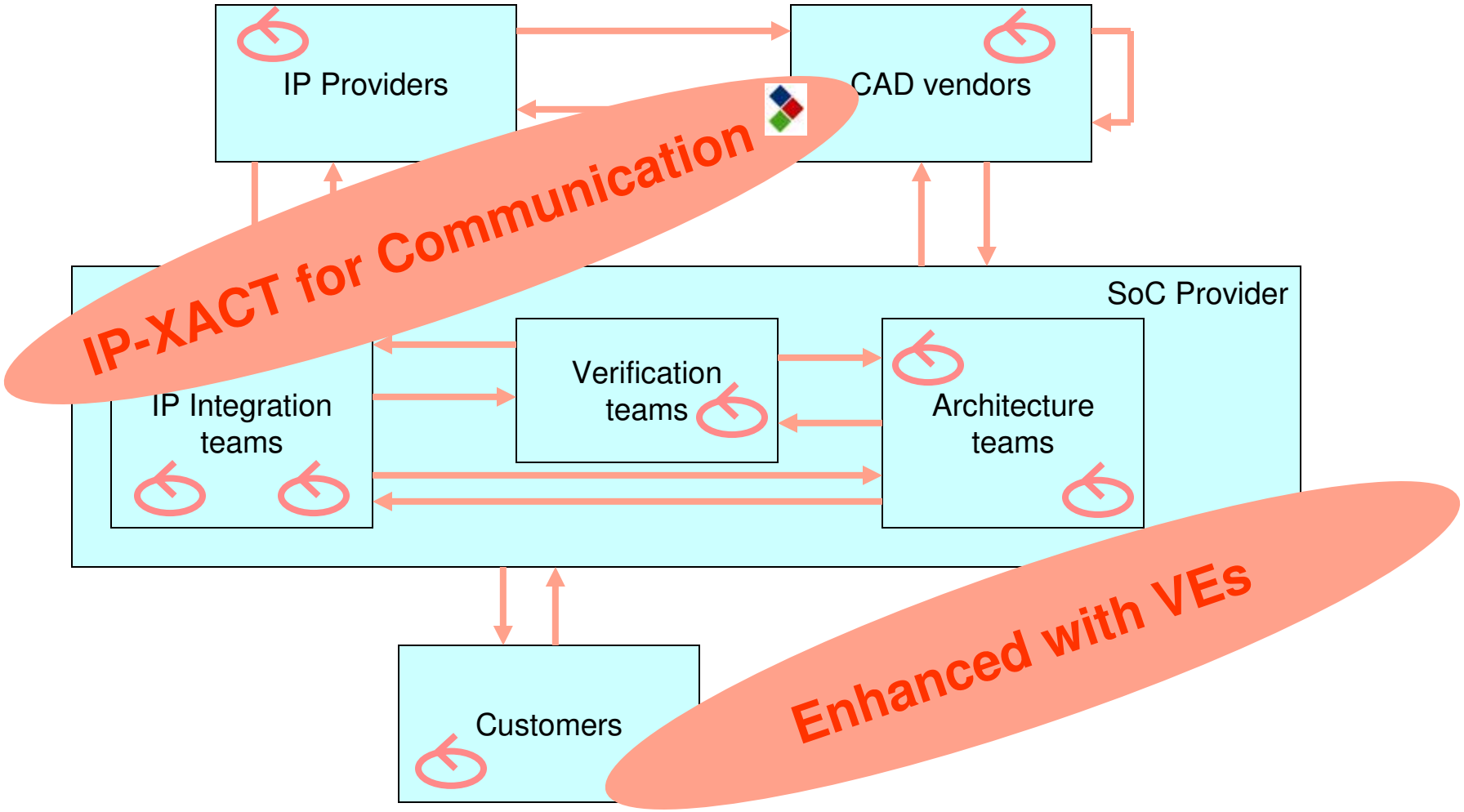
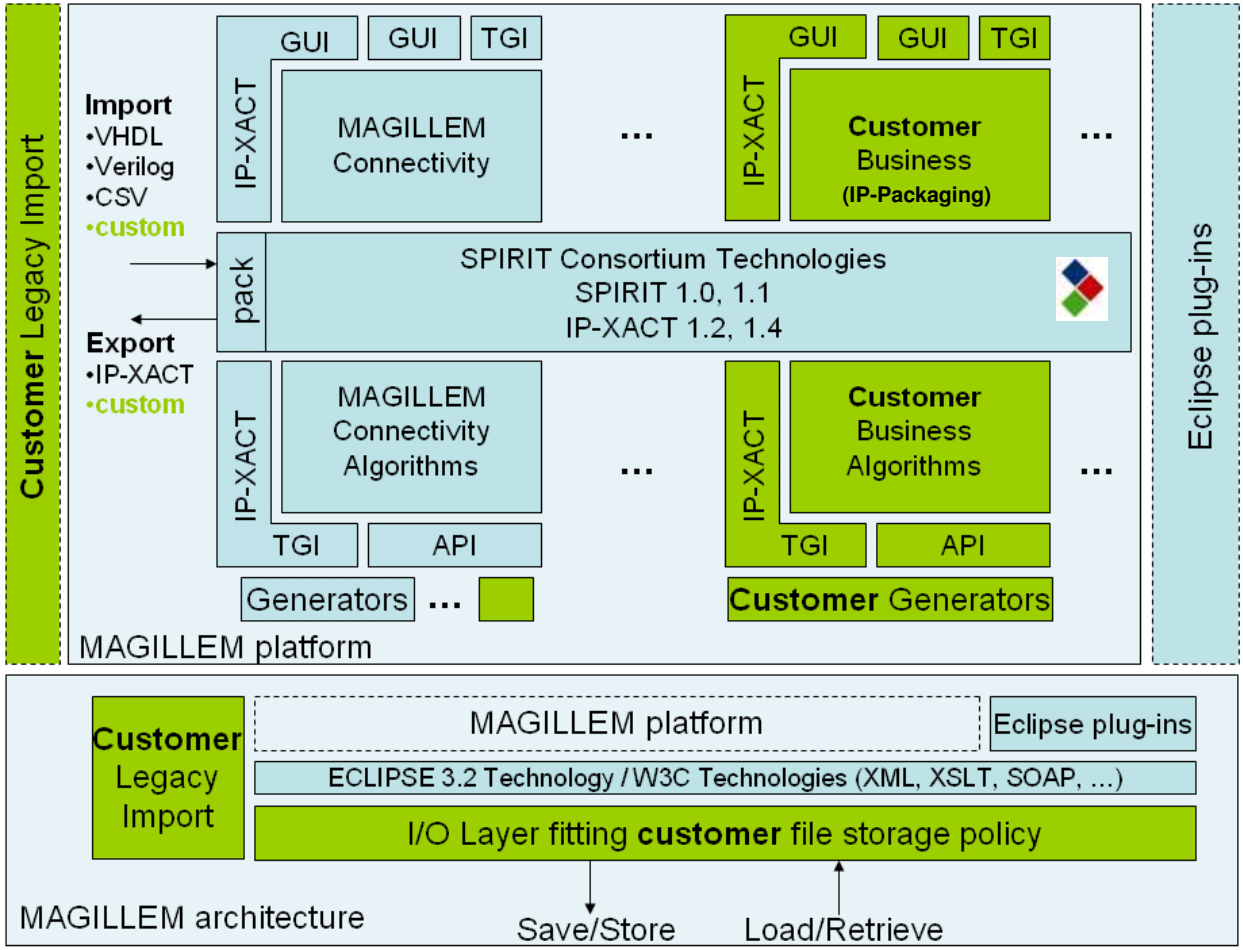
Multiple Flows: Write-Things-Once



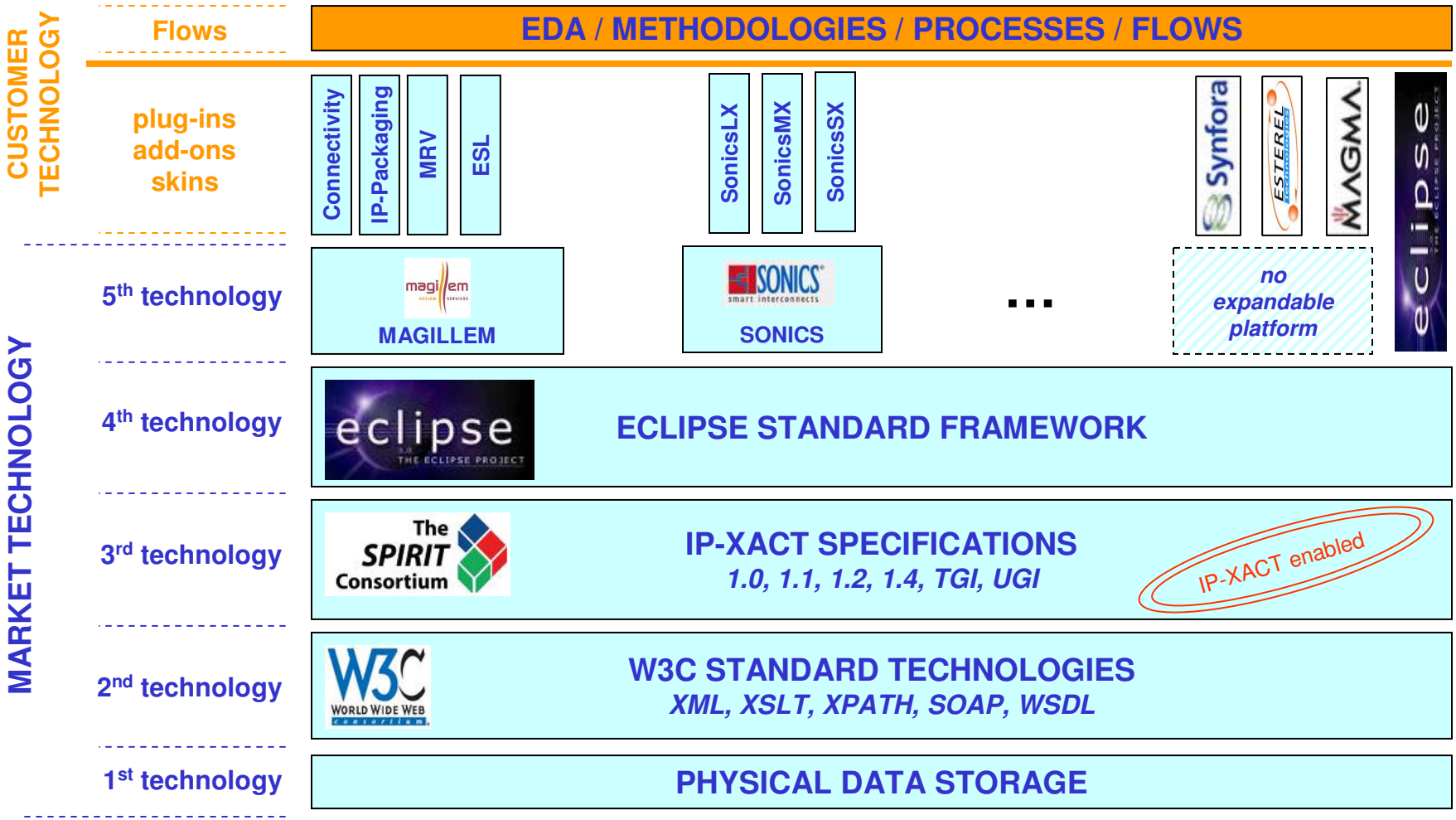
Error-prone data manipulation and duplication between multiple flows removed thru IP-XACT common set of data written once, and fleshed out

State-of-the-art Design Environment

MAGILLEM platform: an example to follow



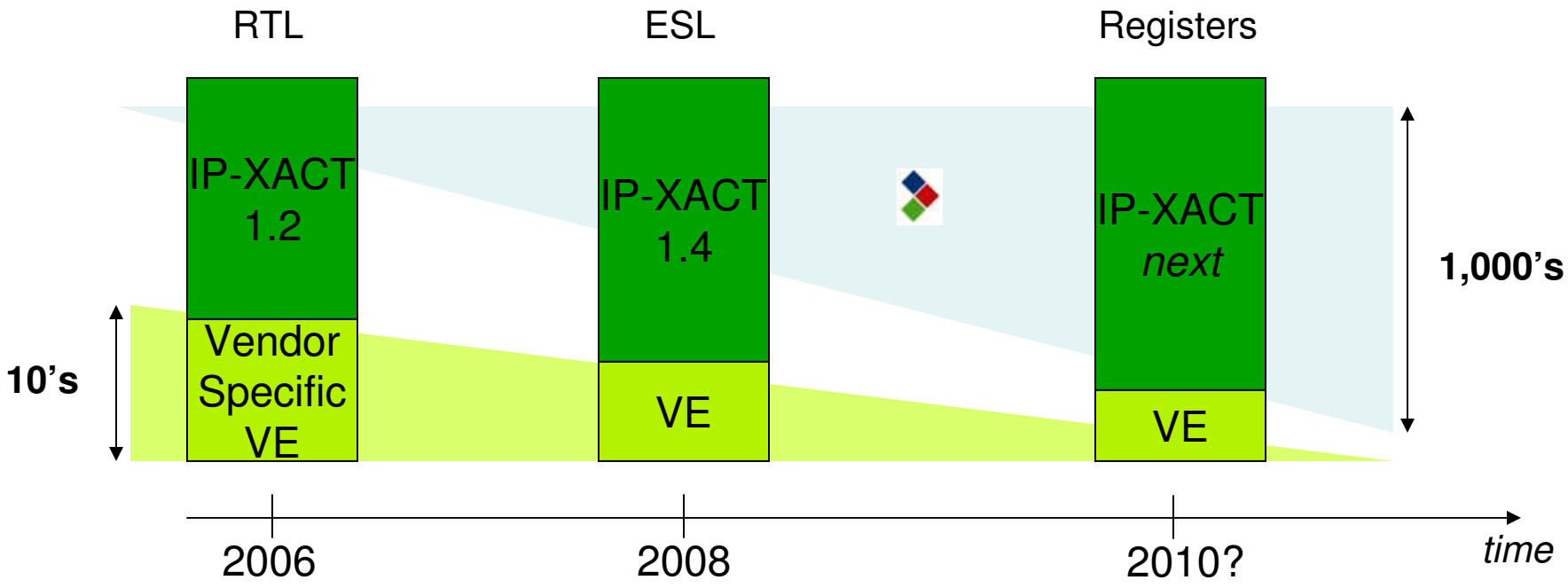
Leading-Edge Platforms
Vetted Technological Market Trends



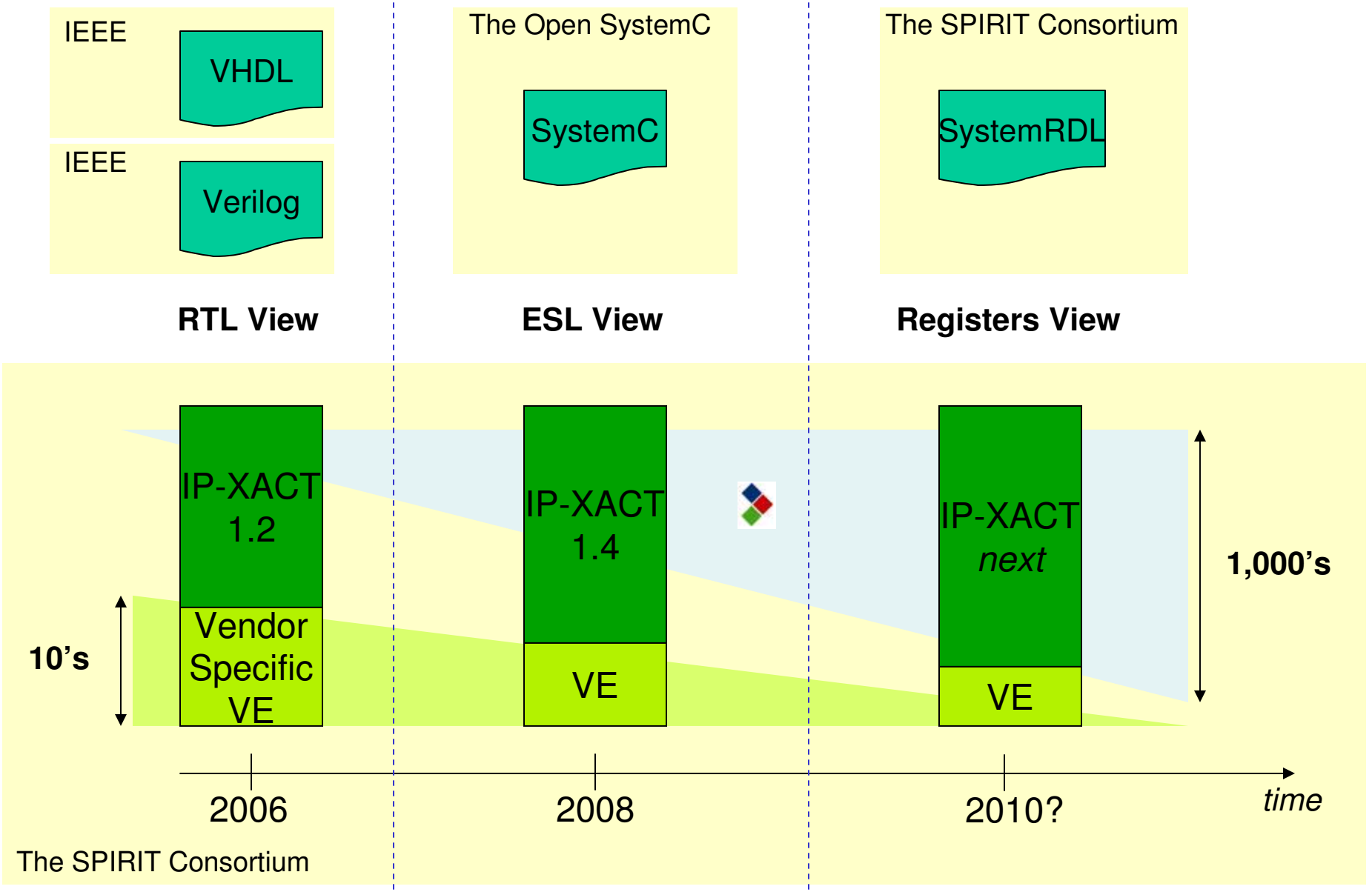
Leading-Edge Platforms
Vetted Technological Market Trends

- **1st Market Technology**
  - **standalone application, proprietary file storage format, proprietary data representation**
- **2nd Market Technology**
  - **Usage of W3C standard technologies to store & exchange data**
- **3rd Market Technology**
  - **Usage of IP-XACT to represent, store & exchange data**
  - **Data become auto-configurable and can be changed on-the-fly**
  - **Tools are IP-XACT enabled**
- **4th Market Technology**
  - **Usage of ECLIPSE standard as integrated application framework**
  - **Usage of numerous ECLIPSE plug-ins & add-ons**
- **5th Market Technology**
  - **Proprietary ECLIPSE-based opened expandable platform**
  - **Plug-in applications plugged onto proprietary platform**
  - **Custom API accessed thru open standard API wrapper *(ala FreeMarker, PDTK, …)***
- **EDA, Methodologies, Flows & Processes**
  - **Developed over plug-ins invoked in CLI batch mode or thru a GUI**

IP-XACT Enhanced with Vendor-Extensions (VE)



Languages & IP-XACT meta-data



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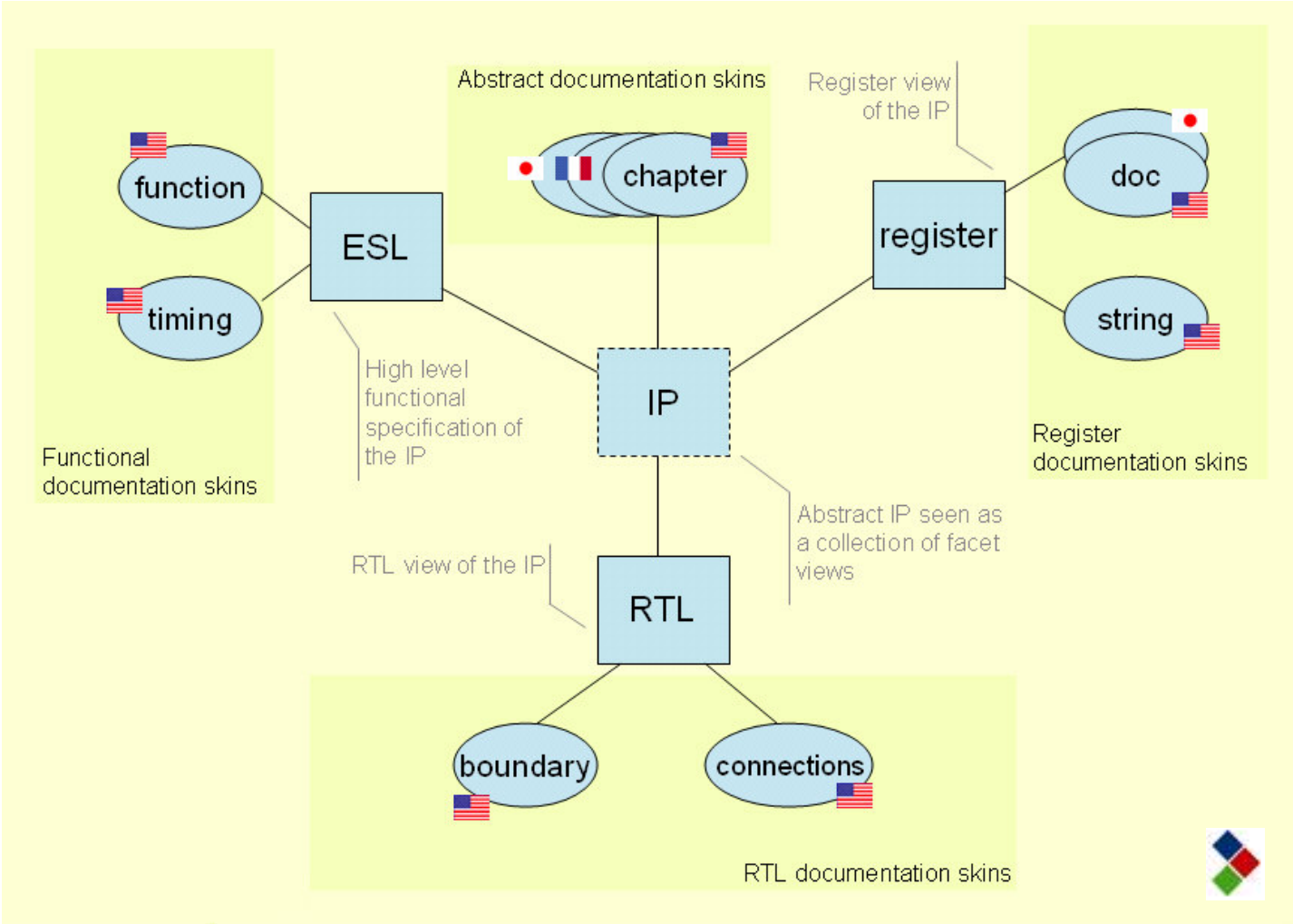
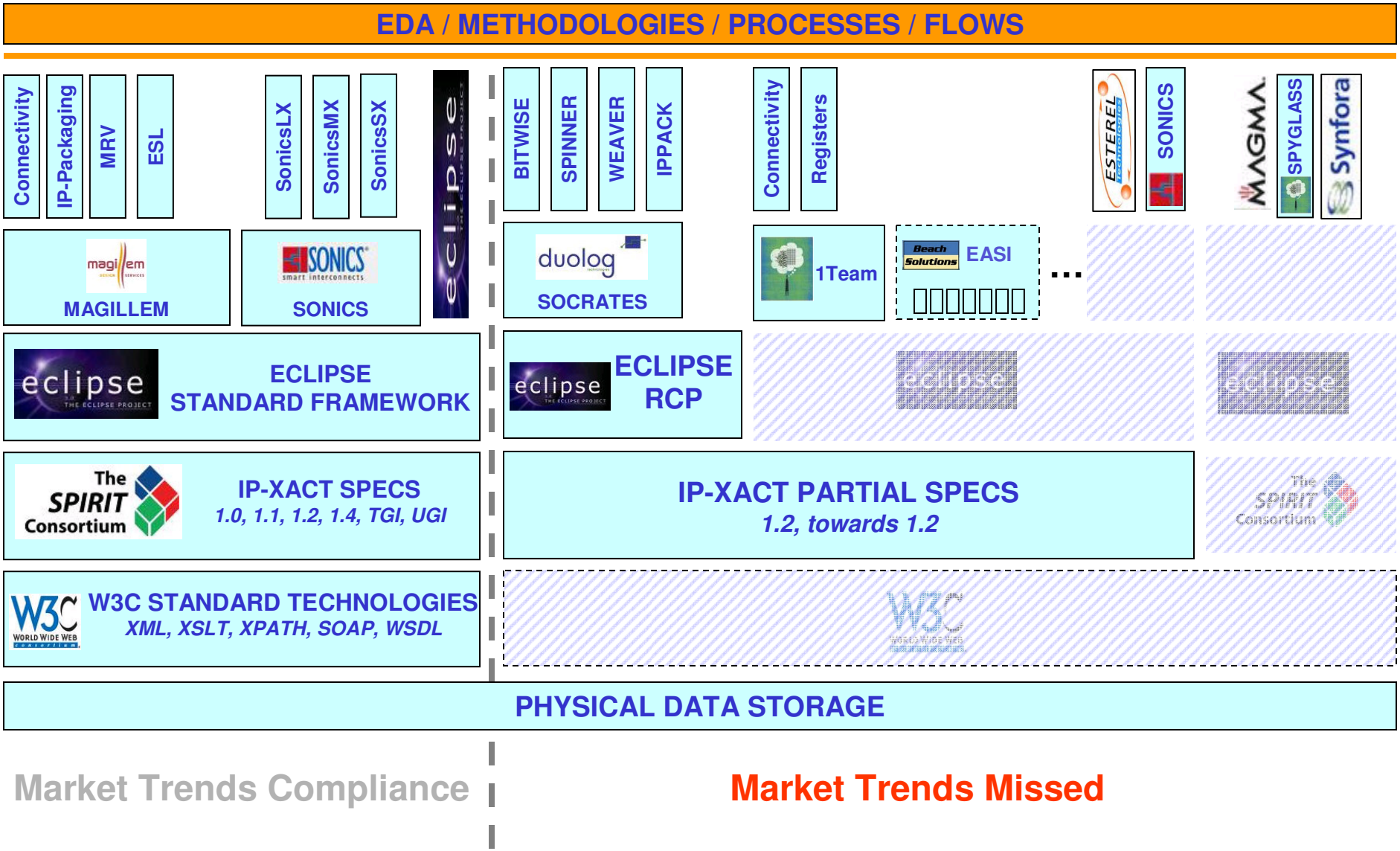
IP Deliverables towards IP Facets



Where do tools fit in the Market Context?



Market Trends Compliance | **Market Trends Missed**

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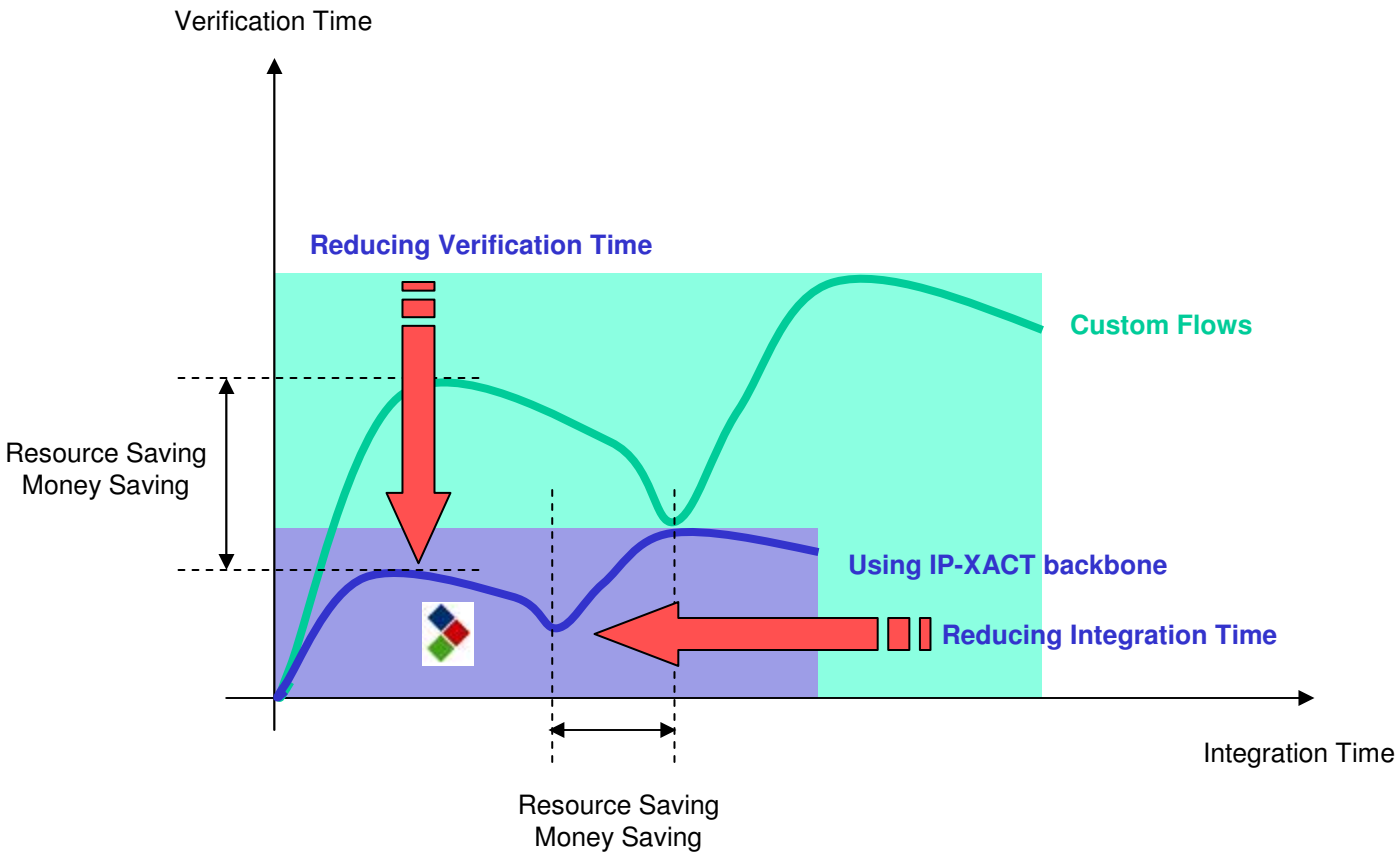
Benefits: dramatic ROI & TTM Improvements



Thank You

for any inquiry, contact
bertrand.blanc@3B-Consultancy.com