



QuickData as RosettaNet PIP™ 2A9

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Outline

- **ECIX Defined**
- **QuickData Defined**
- **ECIX-QuickData Heritage**
- **QuickData Architecture Overview**
- **QuickData Within RNIF (PIP 2A9)**

ECIX Premise

- **Electronic Component (EC) customers want worldwide access to current component information**
 - Make intelligent purchase decisions
 - Populate local systems *accurately* and with *current* data
- **EC suppliers want cost-efficient method to reach worldwide OEM market**
 - Minimize information publication costs
 - Facilitate engineering change
- **Varied consumer needs - Designers, Manufacturing, Component Engineering, Distributors, VAIPs**

What is ECIX

- **Open standards to enable unambiguous exchange of EC information**
 - Complete Component Information Model
 - Comprehensive dictionary of component properties
 - Computer sensible timing diagrams
- **Between component information suppliers and their end-users**
- **XML based for computer sensibility**
- **Supporting any EC type or package level**

What is QuickData

- XML-based eBusiness information exchange standard
 - Implements “*Give me what I want, When I want it*” paradigm
 - Standardizes information request queries and provides computer sensible responses
 - Supports single-point and multicast queries
 - Uses dictionary driven message definition for fullest extensibility
 - Based on standard internet protocols
-

QuickData Scope - PCA Design



Identify component PNs matching design points

PN, GTIN, Supplier are all unknown

Search multiple suppliers

Component classification used with other search filters

Evaluate and Compare candidate PNs

Technical Data, e.g. Package types

Business Data, e.g. Lifecycle status

Manufacturing Data, e.g. Shipping Package Options

Design using the selected component PN

Request Design Information

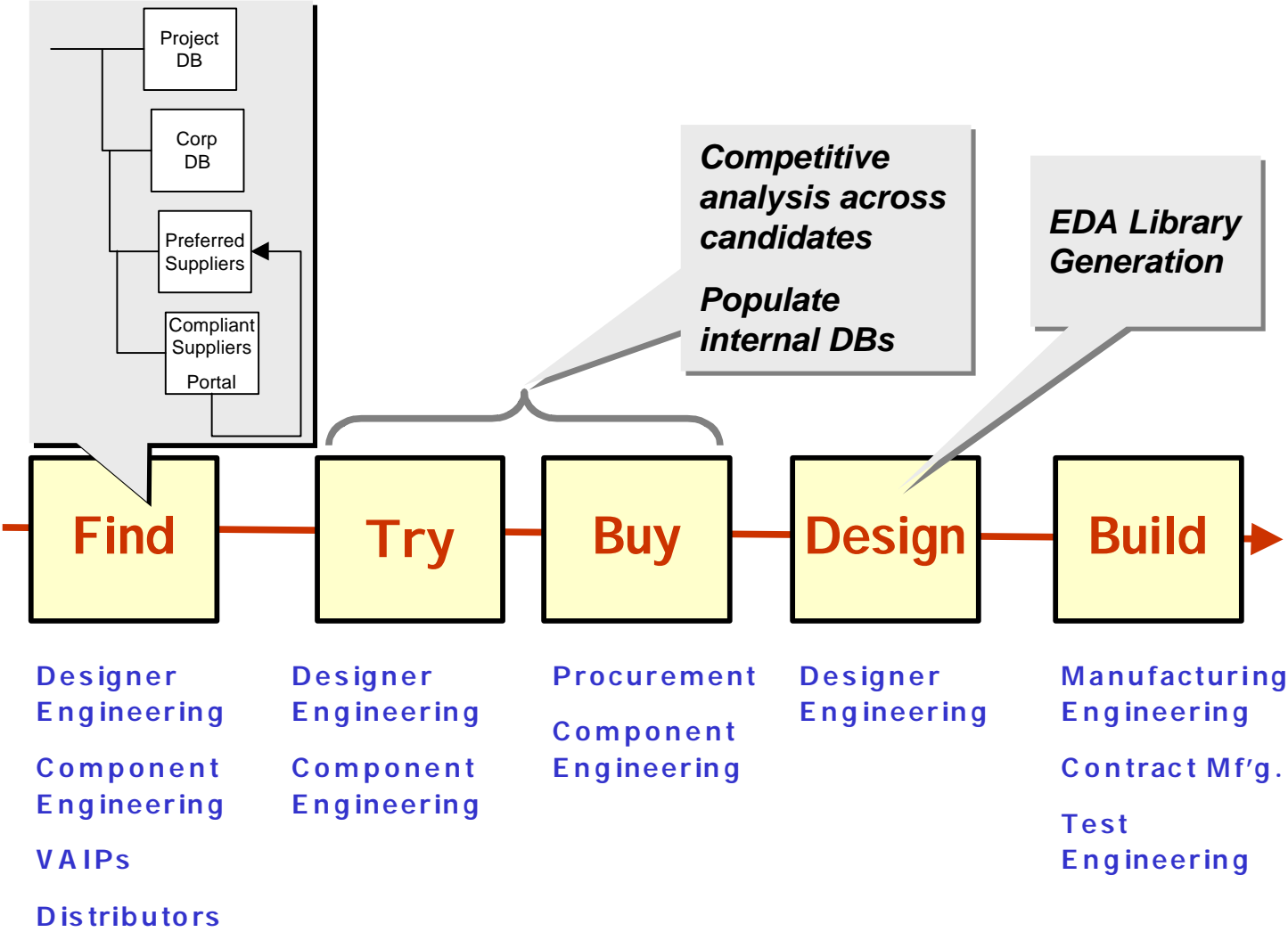
- Pin Map
- Footprint
- TDML
- Sim Models
- ...

Build and test the PCA

Request mf'g. and test related information, e.g.:

- In-circuit Test Data
- Max current
- 2nd source

QuickData Customer Scope



What's in it for Consumers

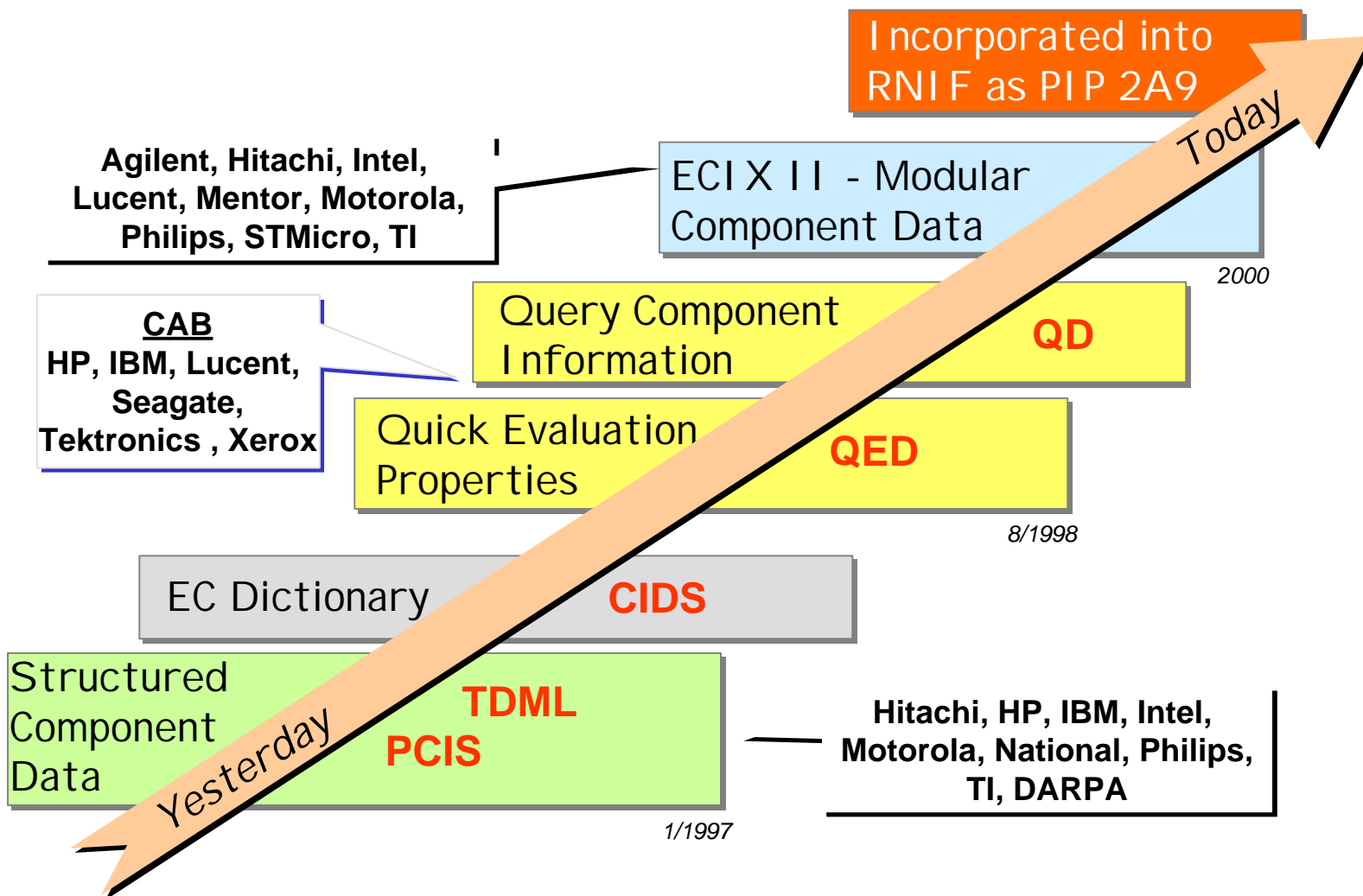
- **Multicast search for candidate parts allows for methodology enforcement**
- **Single GUI across all component databases**
- **Query only necessary/desired information assets**
- **Better assurance of up-to-date information**
- **Provides greater consistency of information across suppliers**
- **Computer sensible results, eliminate information reentry**

What's in it for Suppliers

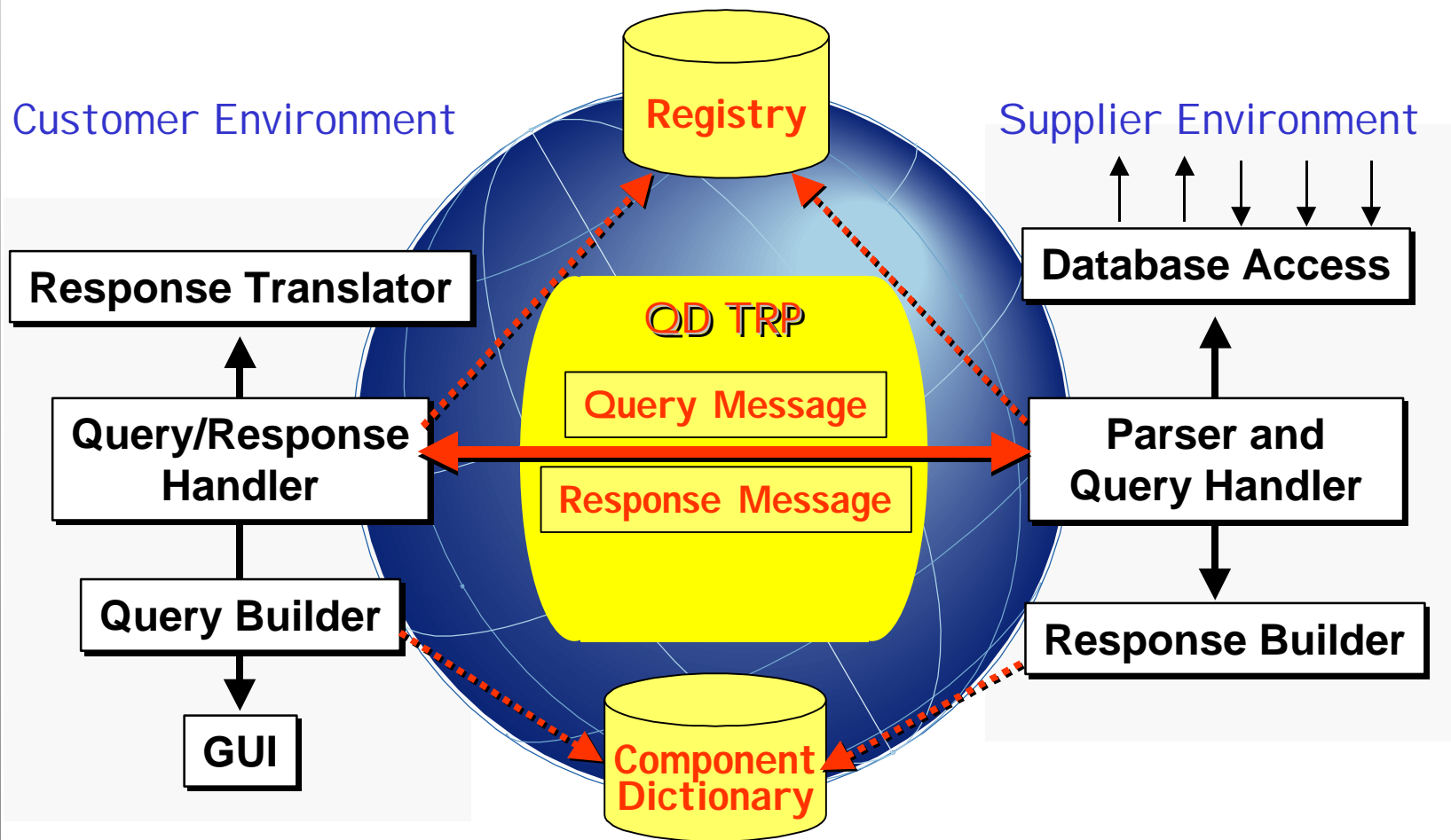
Lowens costs

- **Eliminates information re-targeting**
- **Simplifies information distribution**
- **Standardizes information requests from *all* customers**
- **Allows customer based response decisions**

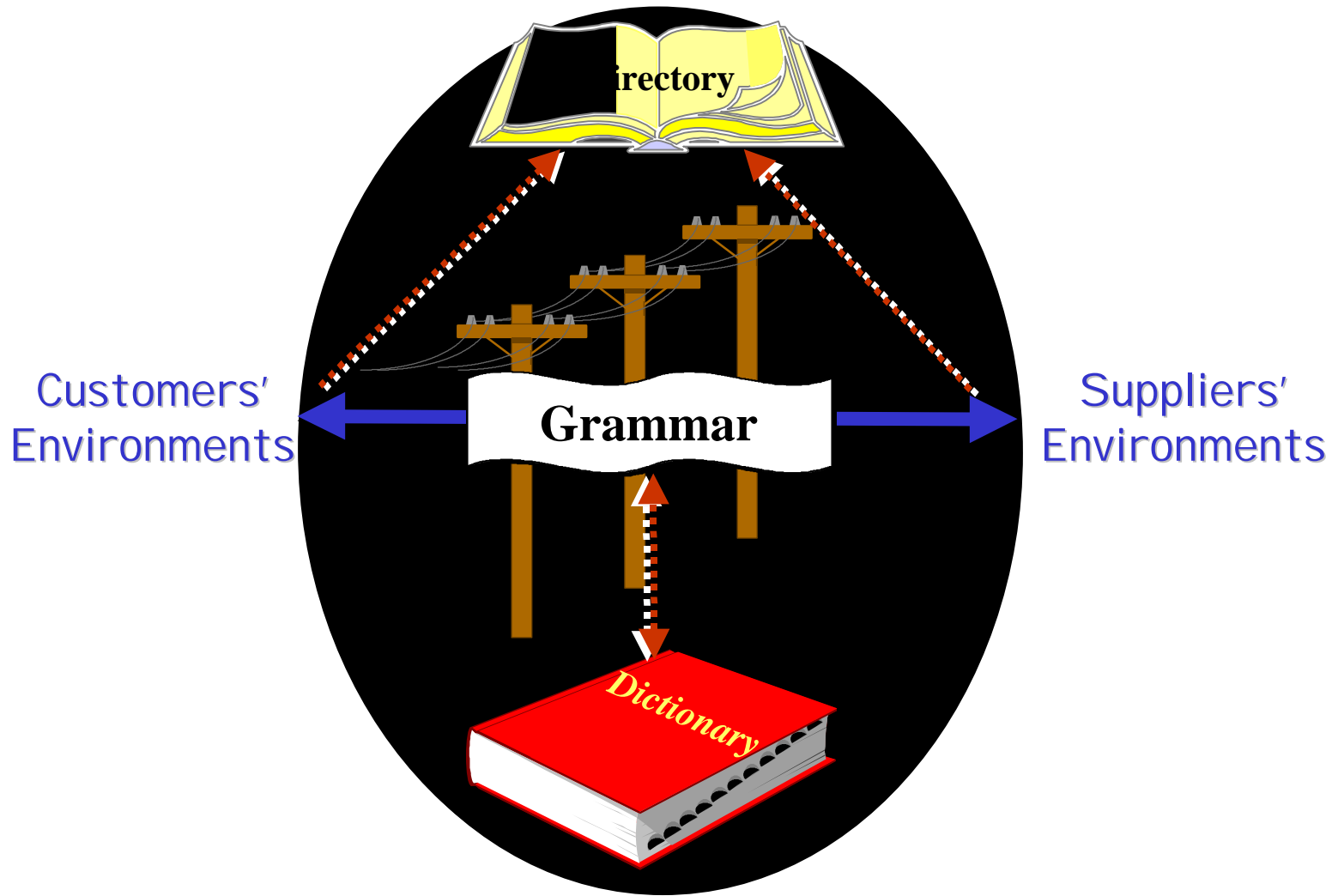
QuickData Heritage



QuickData Paradigm



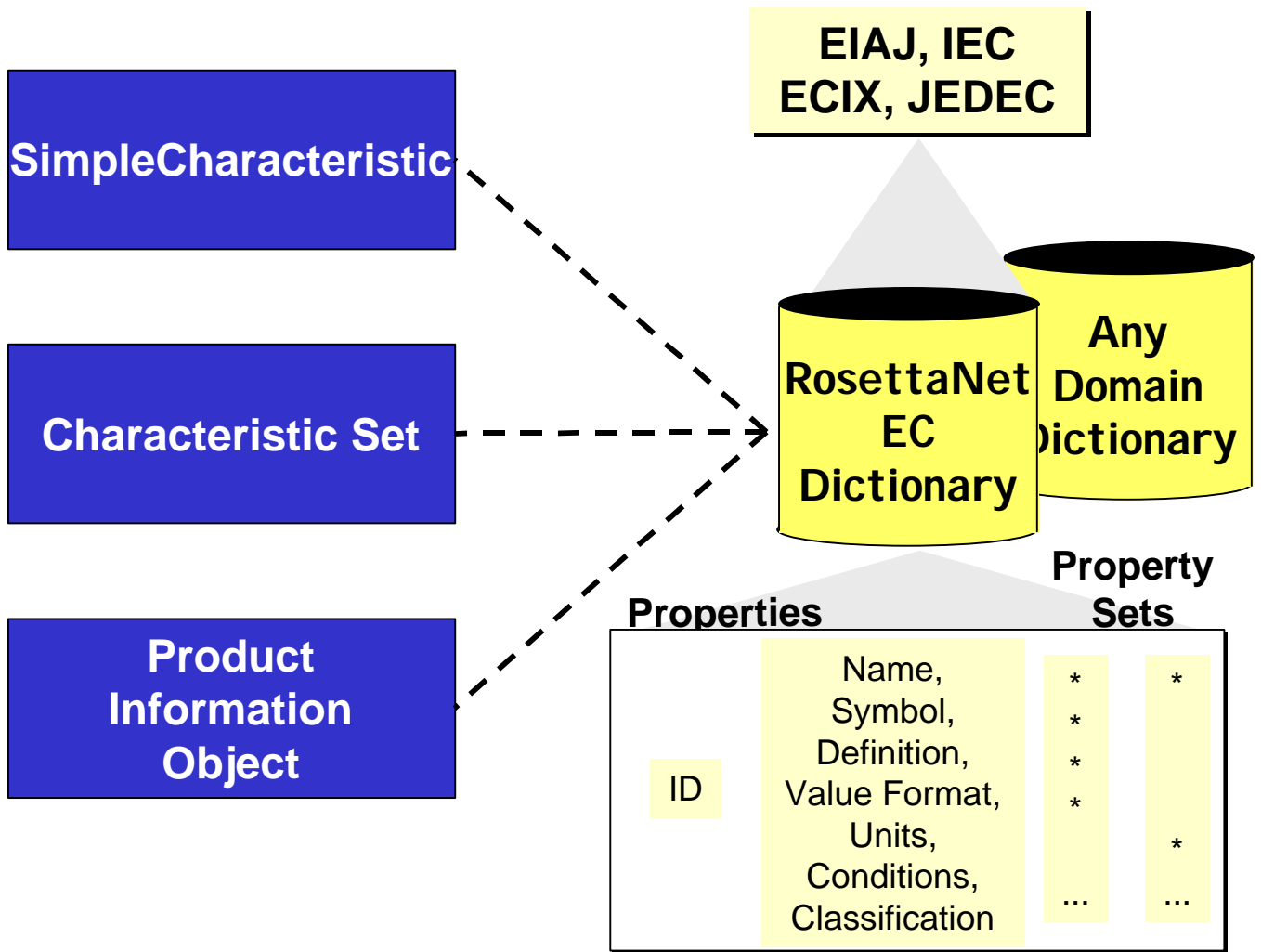
QuickData Standards



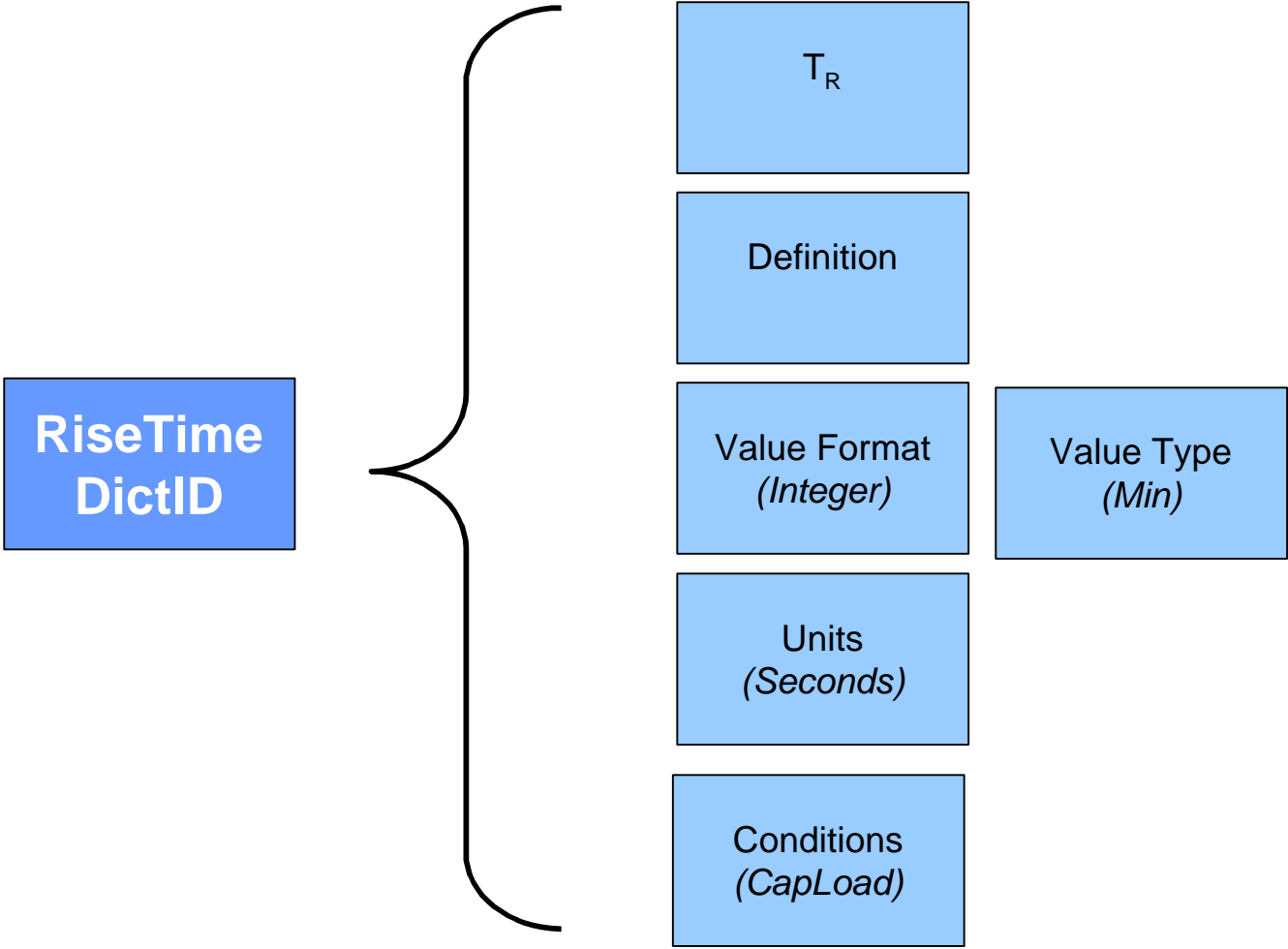
Two Key Architectural Elements

- **Dictionary: Ensures Conformance to a Particular Domain of Use**
 - Property names and symbols
 - Property definitions
 - Property value format and units specifications
 - Standard return status messages
 - Standard property sets and product info objects
 - Taxonomy
- **Registry: Identifies Compliant Participants**
 - Company name (DUNS), URL, contact
 - Identifies Roles
 - Identifies Domains of Use
 - Binds participant(s) to use models, dictionaries, versions

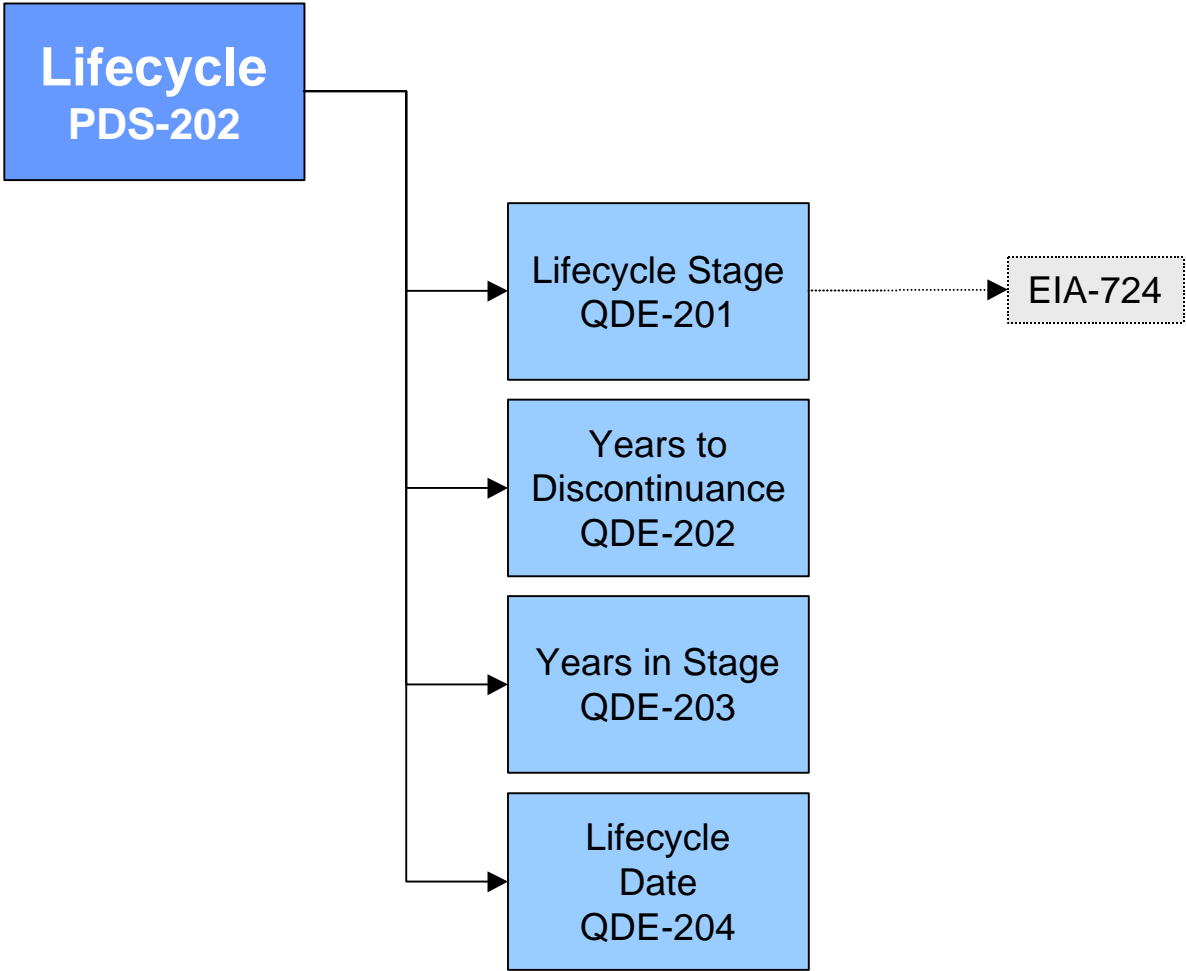
Dictionary



Example SimpleCharacteristic

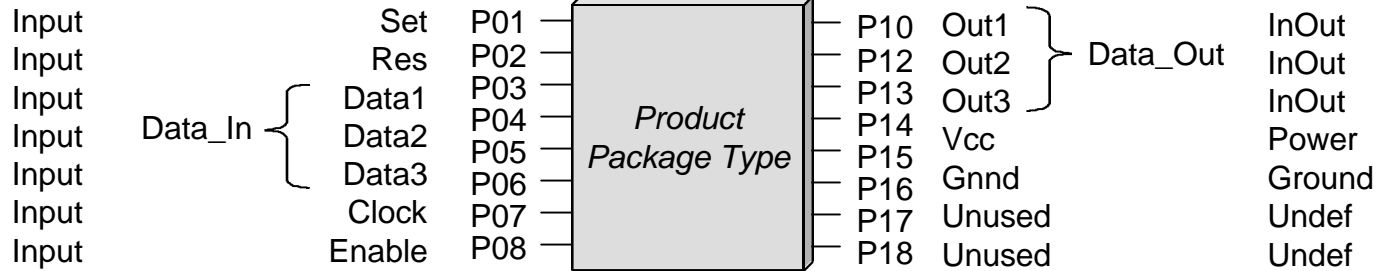


Example CharacteristicSet

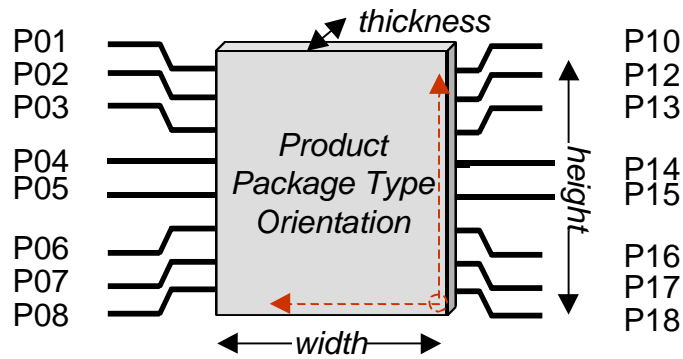


Example Structured PIO (Conceptual)

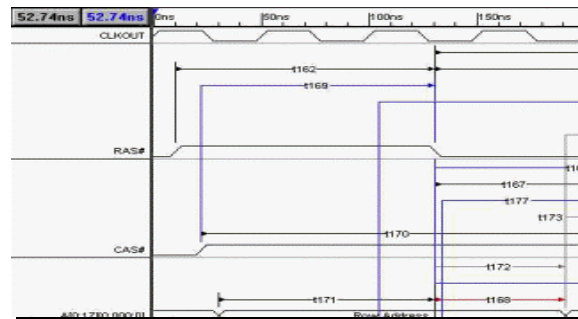
Pin Map



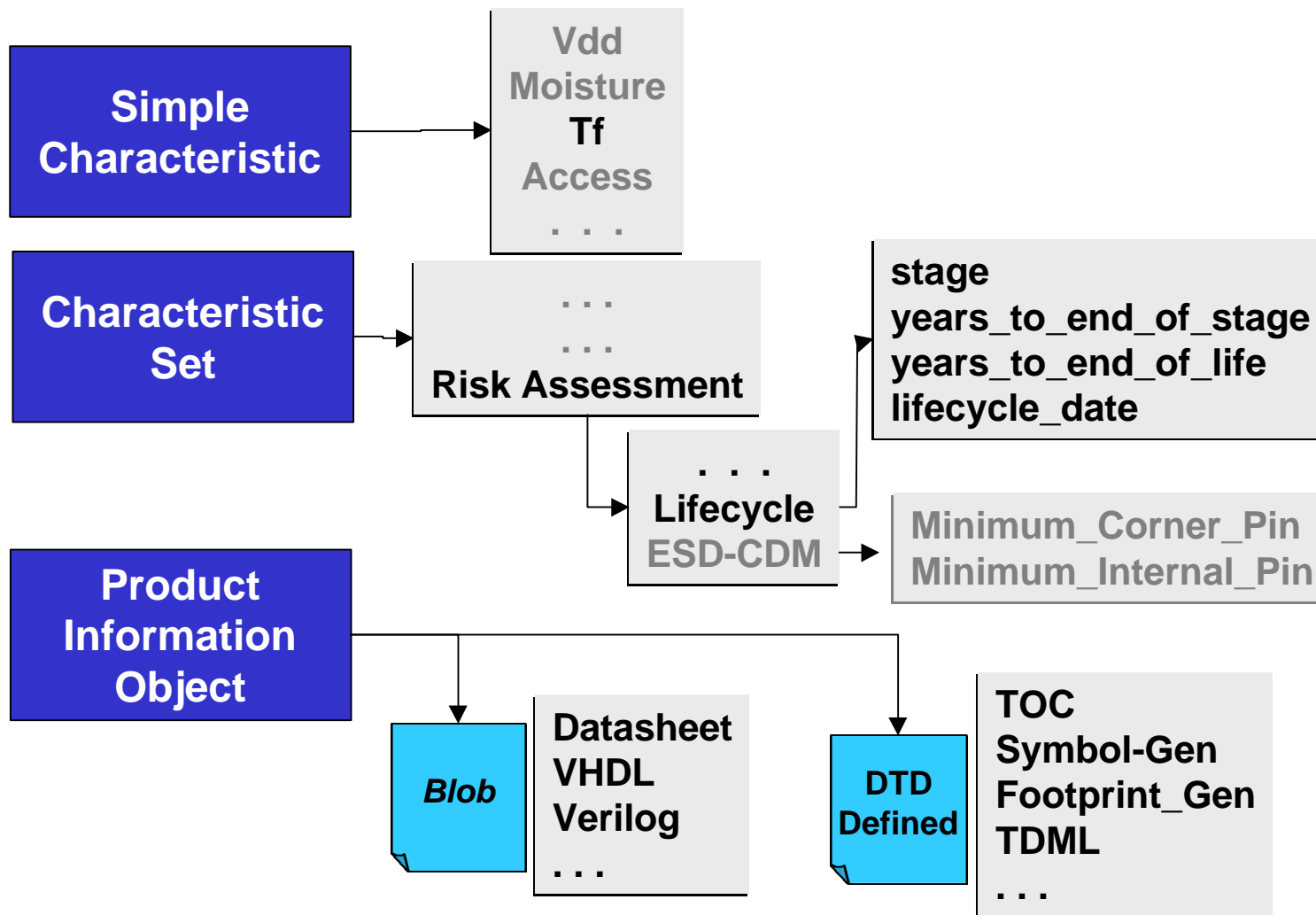
Foot Print



TDML

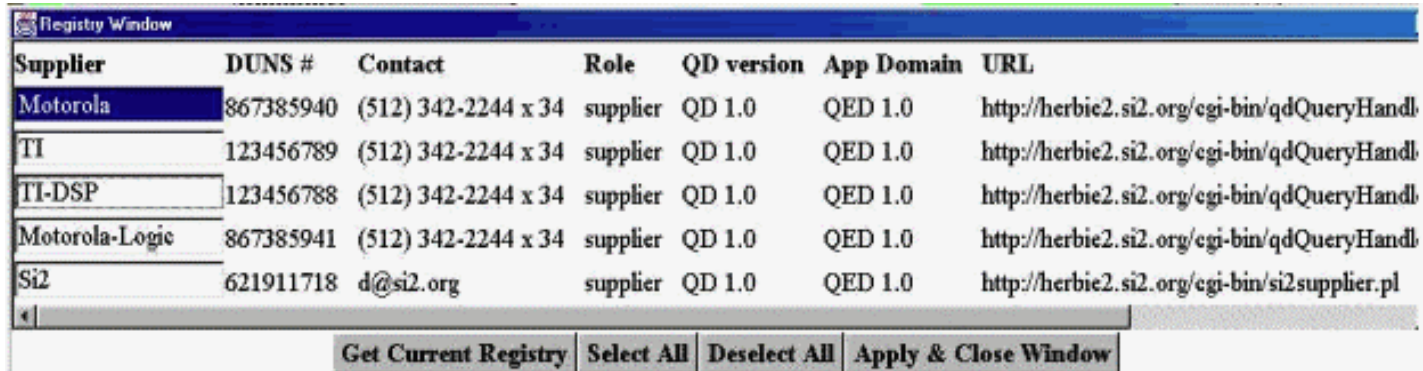


QuickData Information Requests



Registry

- **Identifies Participants (players)**
 - e.g., company name, URL, contact
- **Identifies Roles**
- **Identifies Domains of Use**
- **Binds participant(s) to use models, dictionaries, Versions**
- **Example Registry data:**



The screenshot shows a window titled "Registry Window" containing a table with the following columns: Supplier, DUNS #, Contact, Role, QD version, App Domain, and URL. The table lists five entries: Motorola, TI, TI-DSP, Motorola-Logic, and Si2. At the bottom of the window, there are four buttons: "Get Current Registry", "Select All", "Deselect All", and "Apply & Close Window".

Supplier	DUNS #	Contact	Role	QD version	App Domain	URL
Motorola	867385940	(512) 342-2244 x 34	supplier	QD 1.0	QED 1.0	http://herbie2.si2.org/cgi-bin/qdQueryHandl
TI	123456789	(512) 342-2244 x 34	supplier	QD 1.0	QED 1.0	http://herbie2.si2.org/cgi-bin/qdQueryHandl
TI-DSP	123456788	(512) 342-2244 x 34	supplier	QD 1.0	QED 1.0	http://herbie2.si2.org/cgi-bin/qdQueryHandl
Motorola-Logic	867385941	(512) 342-2244 x 34	supplier	QD 1.0	QED 1.0	http://herbie2.si2.org/cgi-bin/qdQueryHandl
Si2	621911718	d@si2.org	supplier	QD 1.0	QED 1.0	http://herbie2.si2.org/cgi-bin/si2supplier.pl

QuickData Architecture Summary

- **Customer/supplier systems remain proprietary**
- **Customer selects information sets**
 - TOC, PIO's, CharacteristicSets, SimpleCharacteristics
 - Query by name(s) with logical and relational expressions
- **Dictionary**
 - Eliminates ambiguity while ensuring computer sensibility
 - Supports business-specific instances, any information (technical, business, manufacturing,..)
 - Non-standard extensions supported
- **Registry - identifies compliant participants**
 - Refines multicast search
 - Provides for business controls
 - Specifies compliance level

RosettaNet

- **RosettaNet**

- Business Consortia for the IT and EC supply chains
- Define and implement open and common Partner Interface Processes (PIPs™) for business transactions

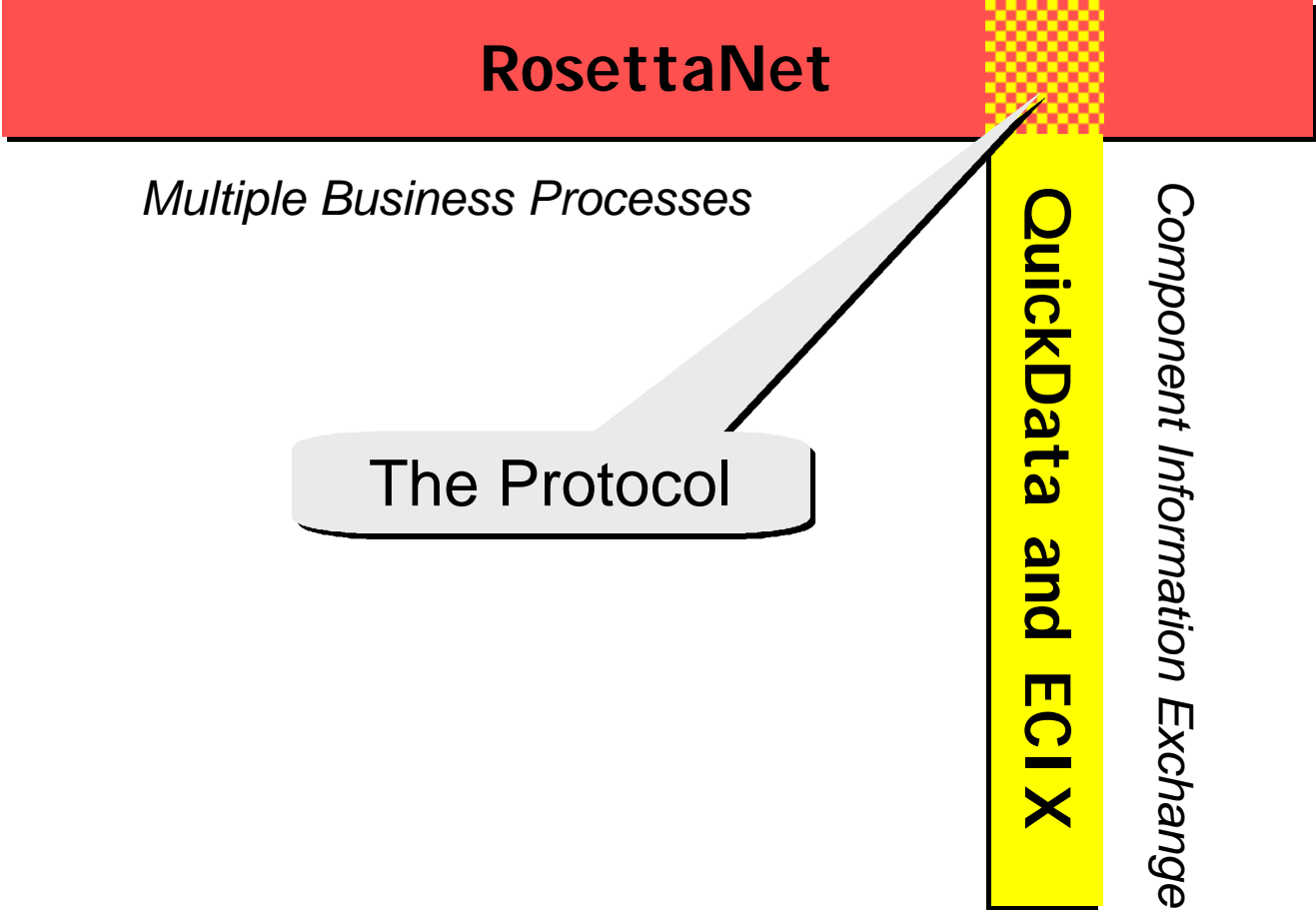


PIP™: specification of services between two partners in the context of a **business process**, the **flow of transactions** and **messages**, and the **data properties** within these messages

PIP Clusters

- | | |
|---|---|
| <ul style="list-style-type: none">• Partner/Product Review• Product Introduction• Marketing Information Mg't. | <ul style="list-style-type: none">• Order Management• Inventory Management• Service & Support |
|---|---|

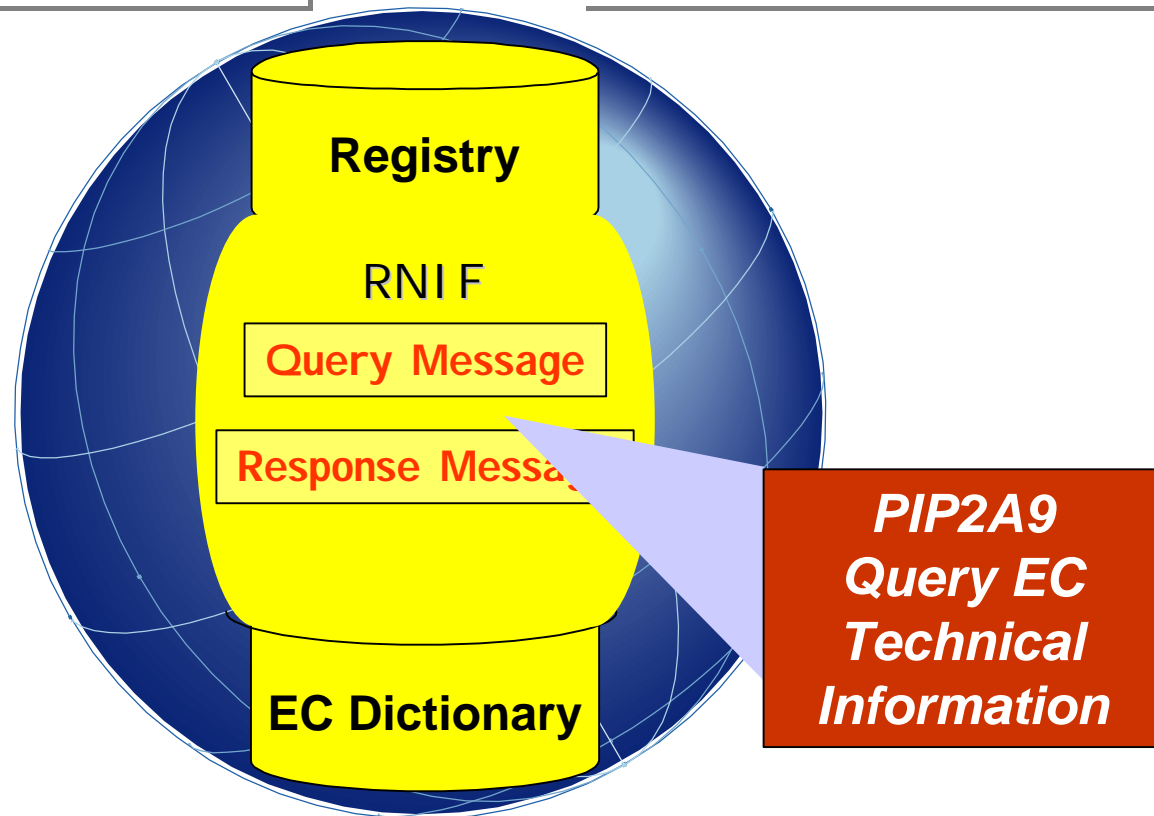
QuickData and RosettaNet



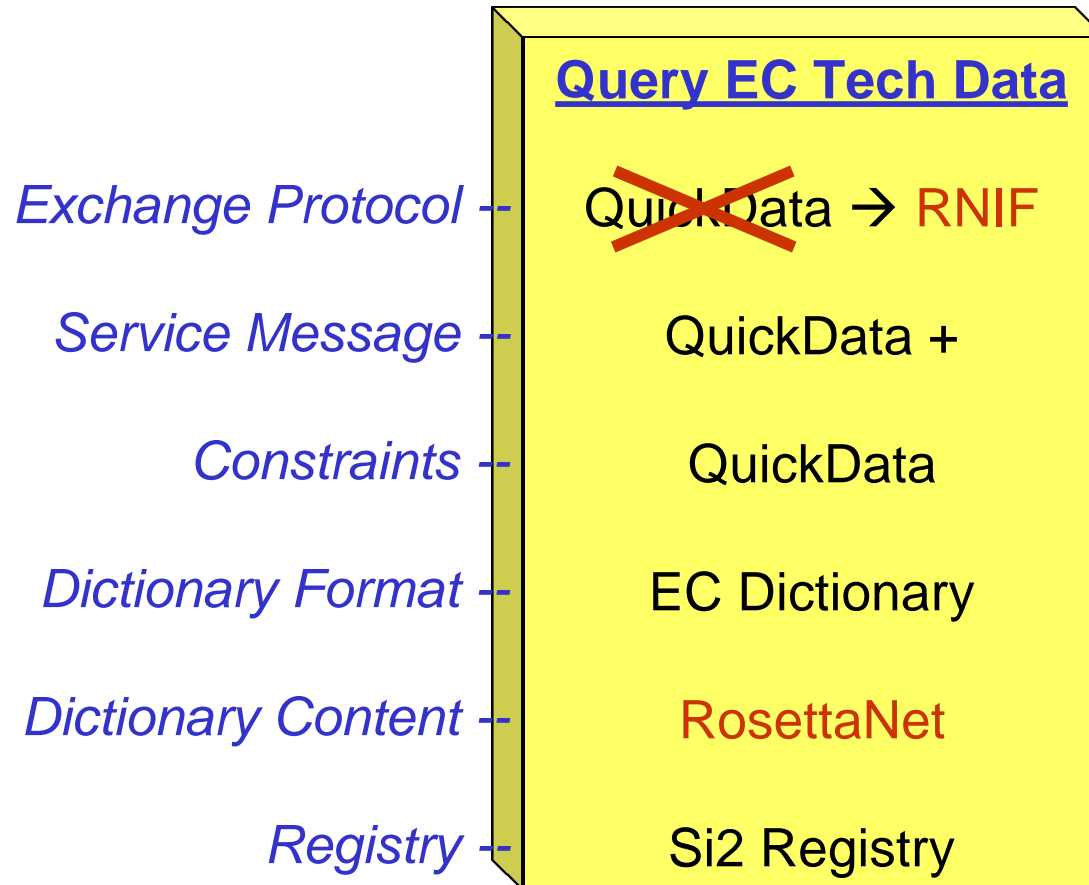
QuickData Within RosettaNet

Customer Environment

Supplier Environment



QuickData as PIP 2A9



PIP 2A9 Architecture

