BHDL Tool

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Specification, Test, Contraintes (LIFL)

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(U.T.C) *(INRETS)*

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Plan

Motivation

HDL / ADL / B

BHDL Tool et Exemple

Les extensions en cours

Conception de systèmes complexes

Métaphore de l'aile d'oiseau

Eléments : Plumes, squelette, vaisseaux, muscles

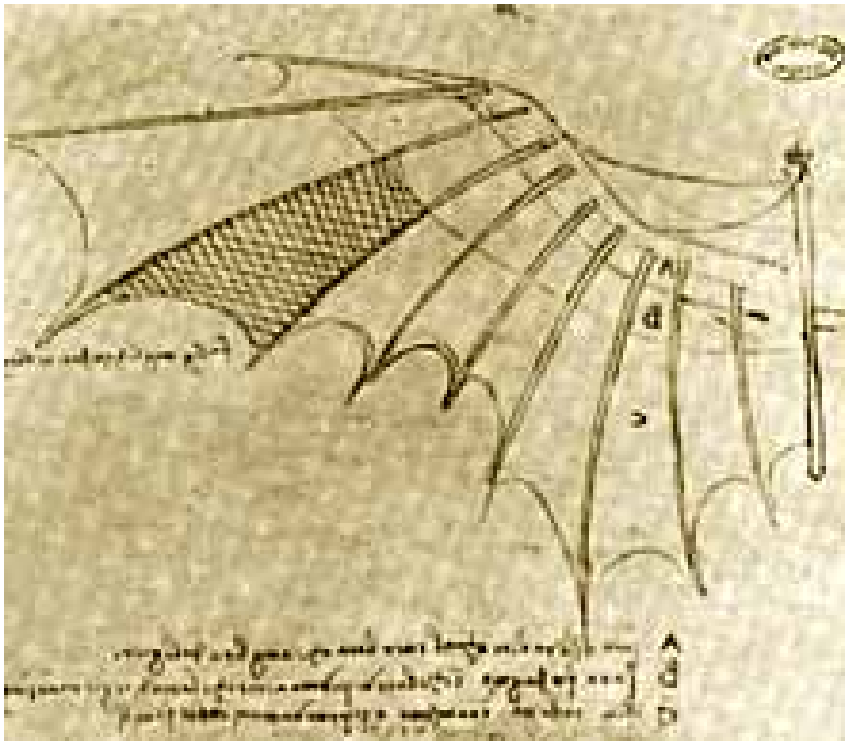
Qualités : Poids, aérodynamisme, protection thermique, résistance

Généricité : plumes, …

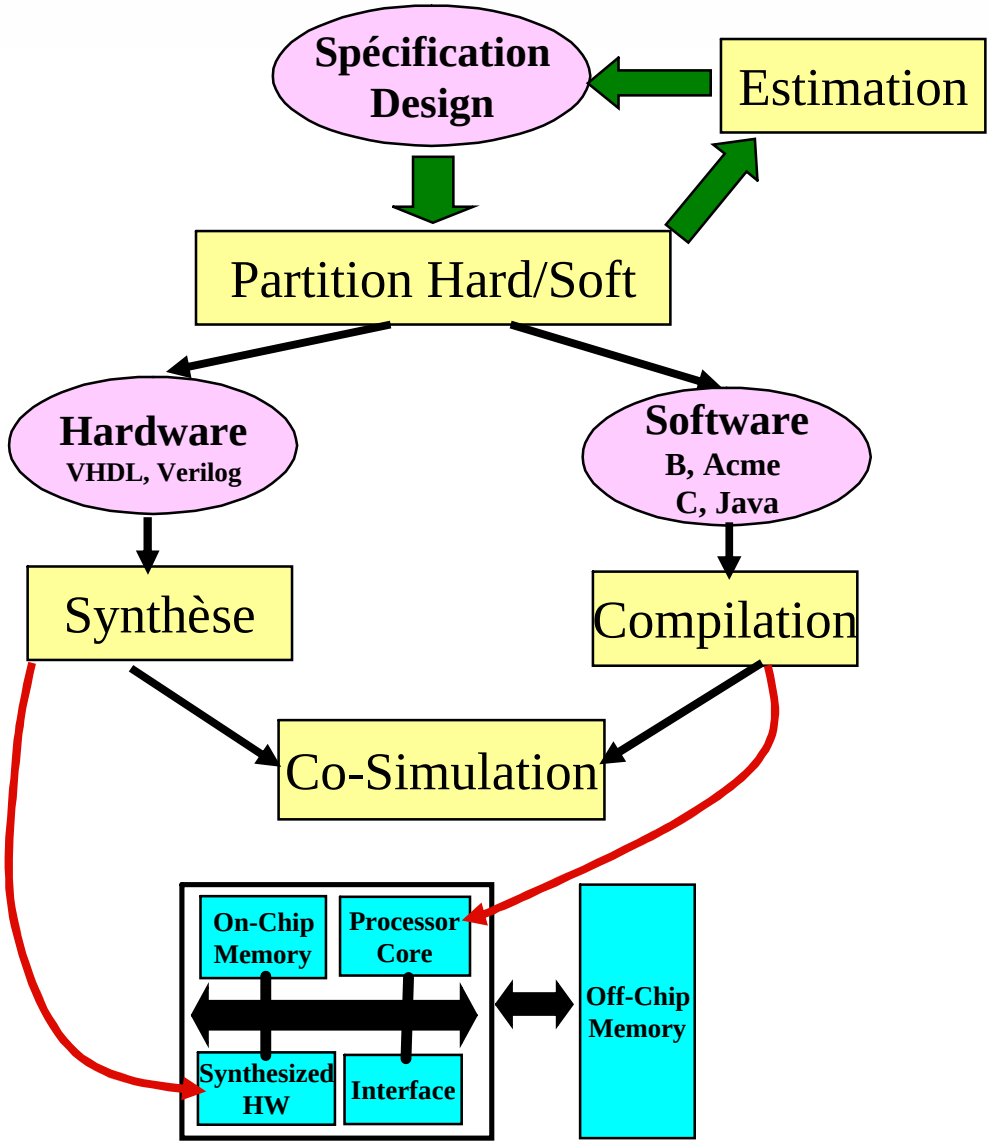
Système :

dynamique

≠ ∑ Points de vue

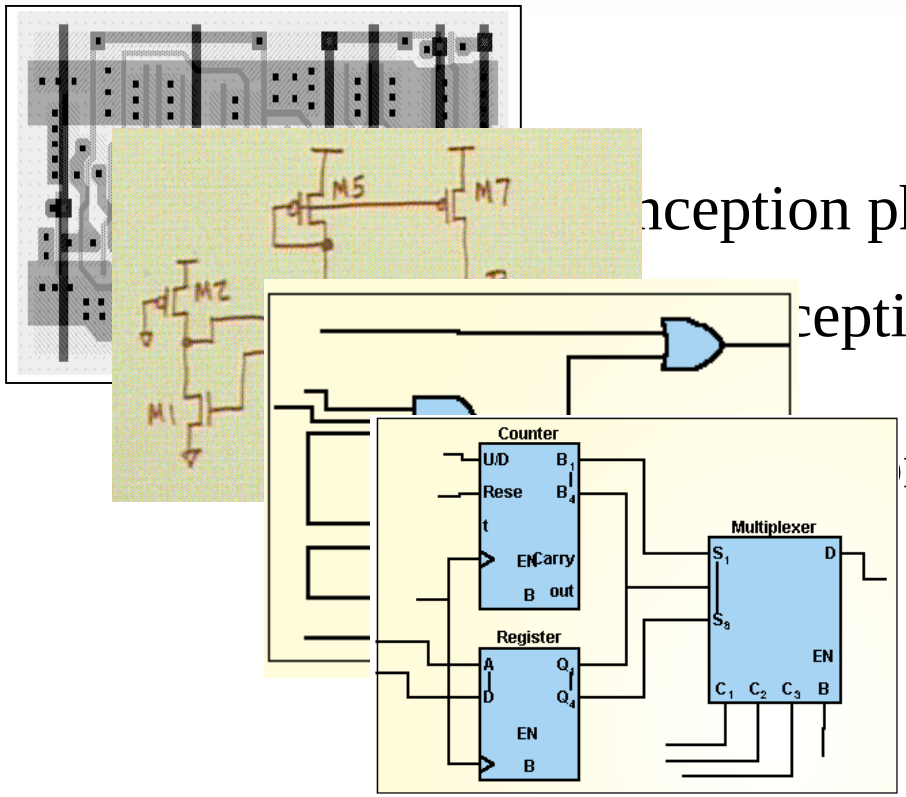


Co-design / Hardware-Software



BHDL Tool

HDL / ADL / B



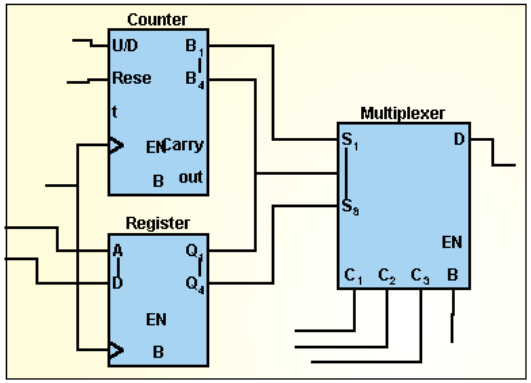
nception physique

ception structurelle

nception logique

Conception fonctionnelle

HDL / ADL / B



VERILOG – **VHDL**

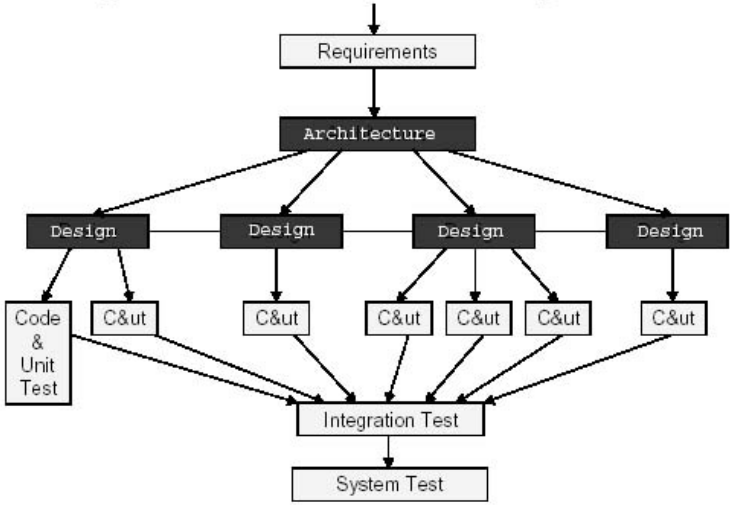
+ *Synthèse*

+ *Réutilisabilité*

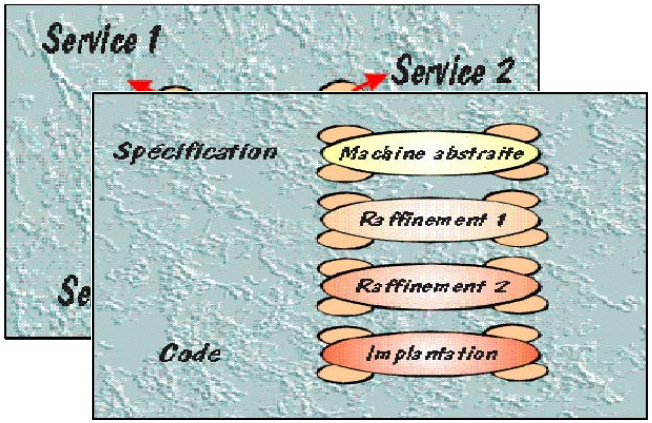
- *Simulation*

Méthode B

Composant
Port
Abstractions
Hierarchie



Wright ... **ACME**
Abstractions

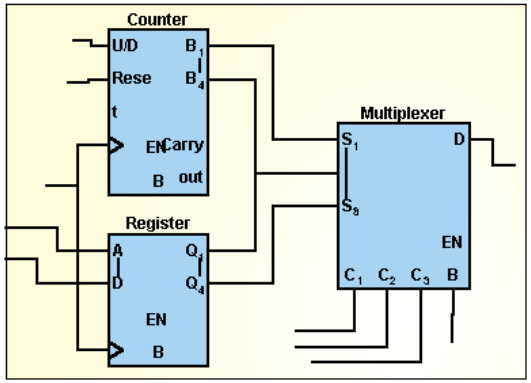


Exigences

Preuves assistées

BHDL Tool

HDL / ADL / B



VERILOG – **VHDL**

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Méthode B

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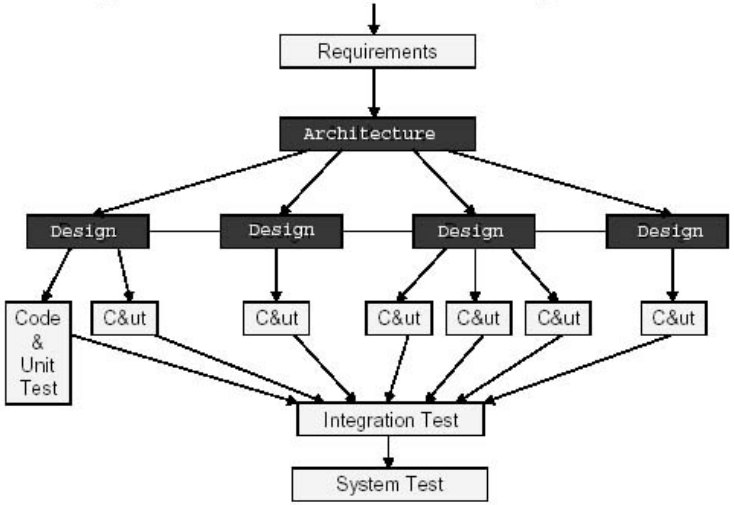

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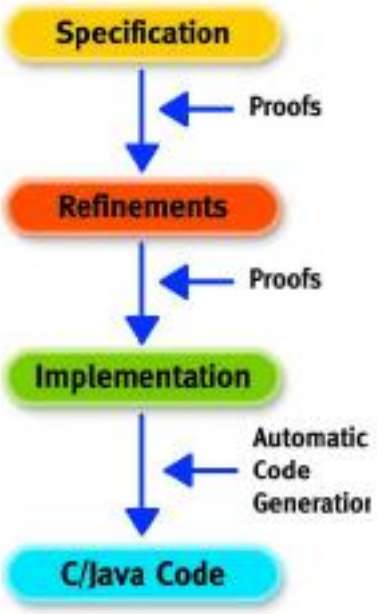
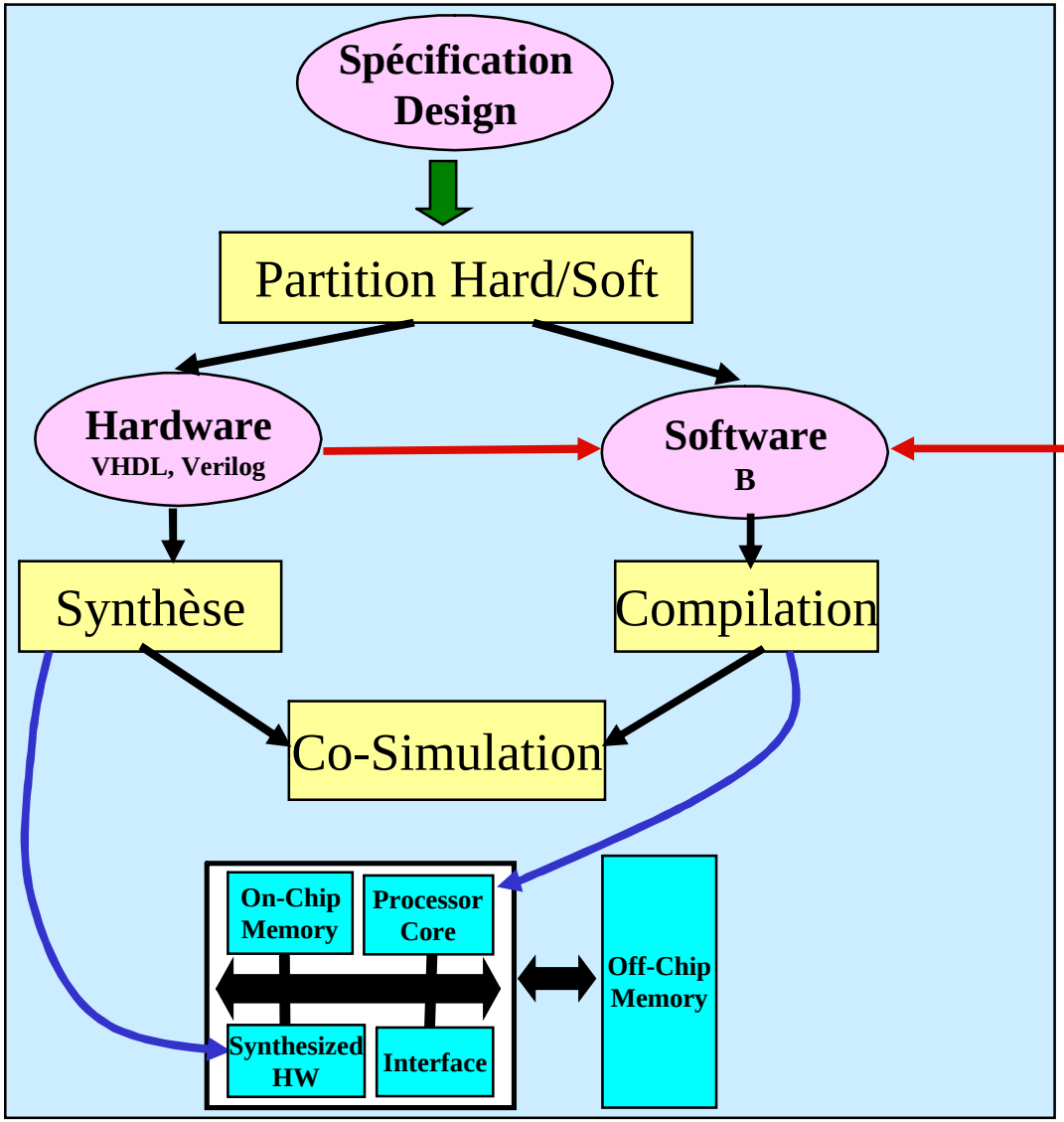
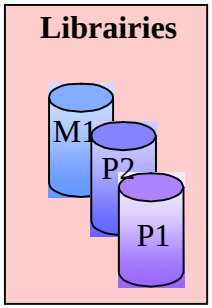
Sureté



BHDL Tool

Co-Design *BHDL*





IEEE Standard

Logic 1164

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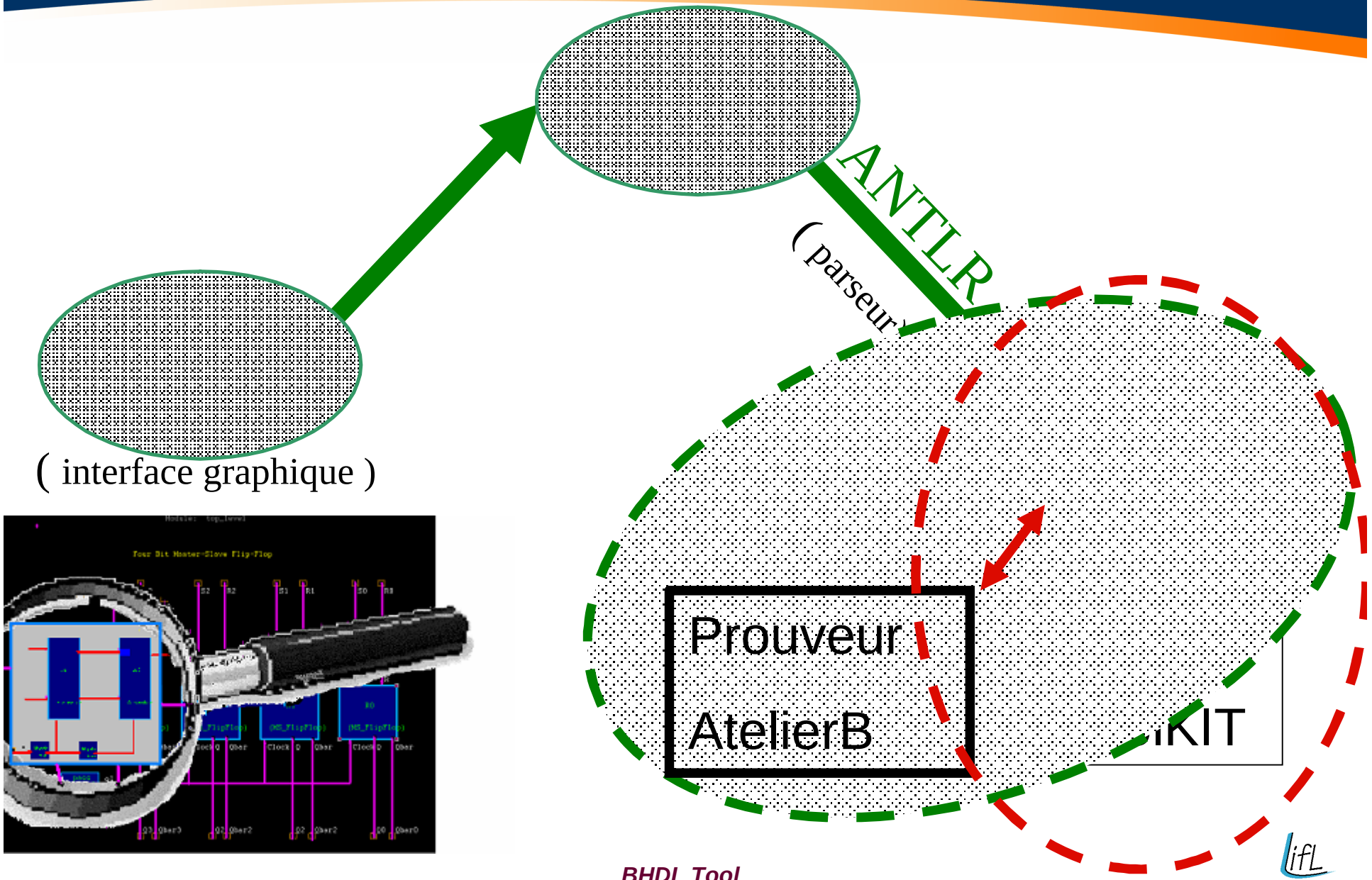
BHDL Tool

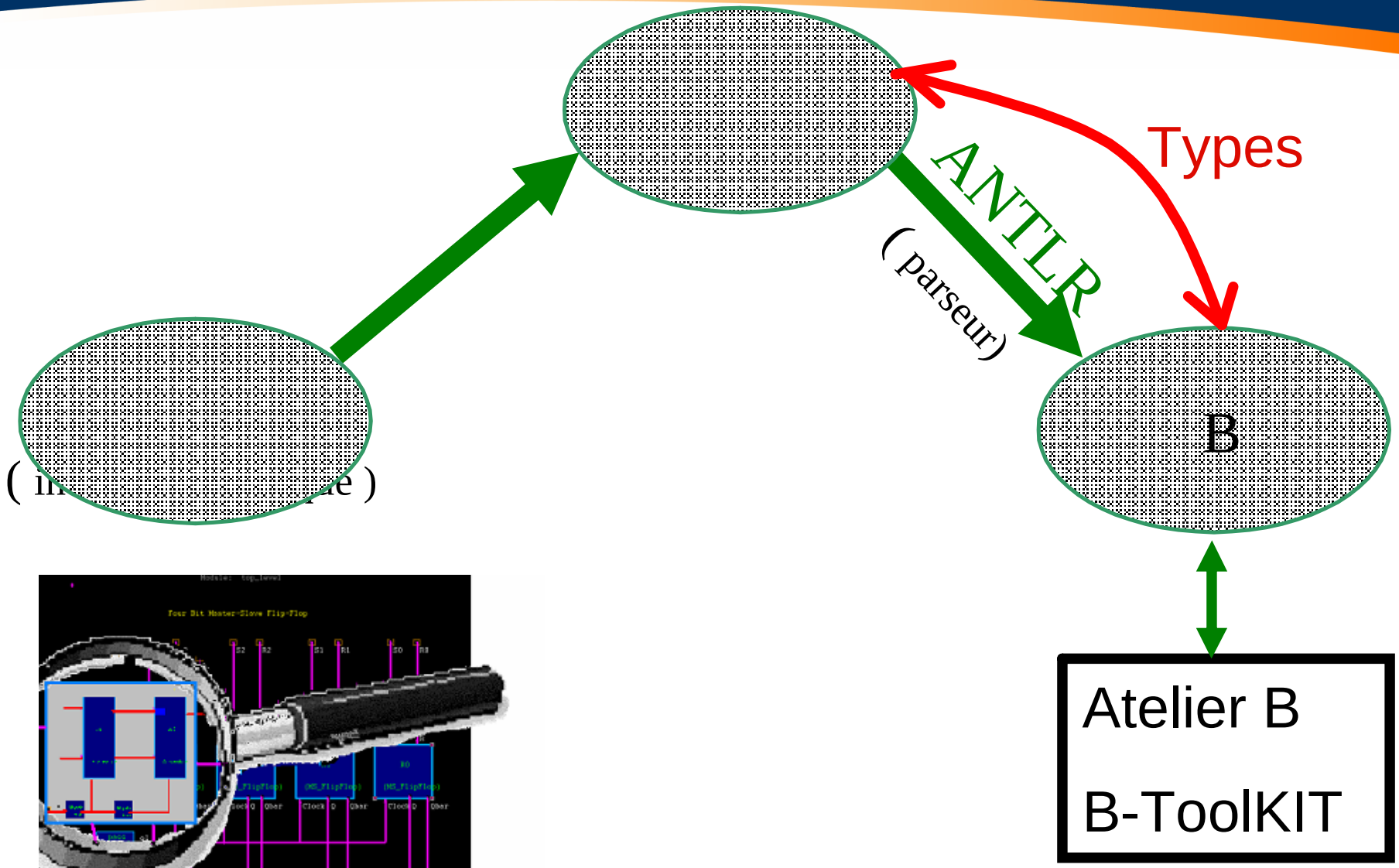
L’expression HDL / B

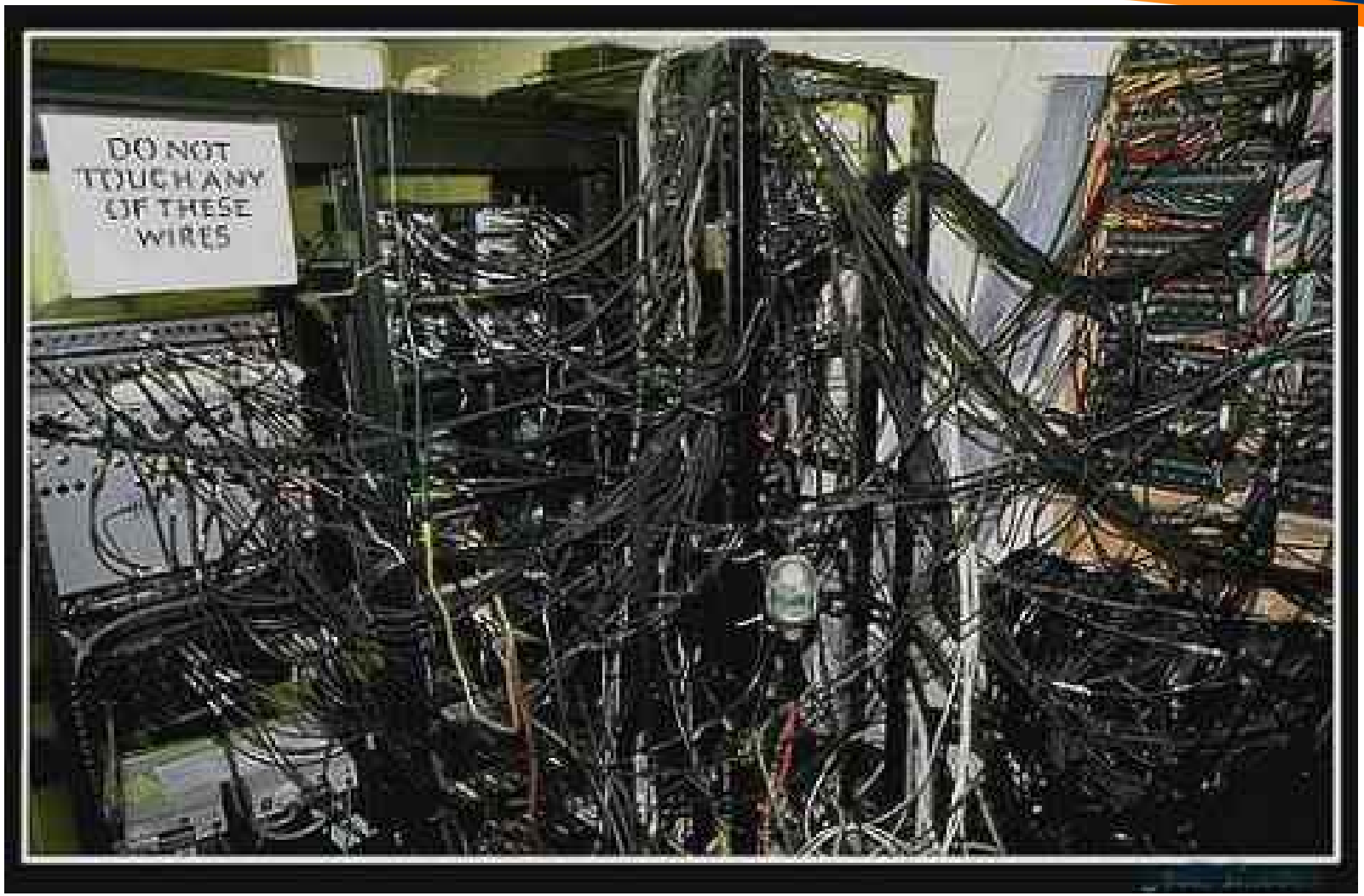
- Le code HDL est utilisé pour spécifier l’architecture structurelle et fonctionnelle des composants
- Le code B généré capture
  - L’architecture structurelle des composants
  - Le type des données
  - Les annotations

BHDL 0.2


ANTLR
(parseur)
(interface graphique)
Prouveur
AtelierB
iKIT
BHDL Tool

BHDL 0.3

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