



Examples:

Hardware design (VHDL, Verilog)

✓ Used by semi-conductor companies such as Intel

Critical embedded software (B/Z, Lustre/Estere)



✓ Urban Transportation
(METEOR Metro Line 14 in Paris by Alstom)

✓ Rail transportation (Eurostar)

✓Aeronautic(Airbus,Europter,Dassault)

✓ Nuclear plants (Schneider Electric)

Formal Methods of Verification

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Pros and cons of using formal methods

- ✓ Nothing better than a mathematical proof
 - ➔ A code “proven safe” is safe
- ⦿ Development is time and effort (and so money) consuming
 - ➔ Should be motivated by the risk analysis
- ⦿ Do not prevent from specification bugs
 - ➔ Example of network protocols