Designing IoT Devices

Going To Market
Innovators face a cusp where dreams become reality. Or not.

**Gumstix Pioneered the Linux™ Miniature COM Industry**
- Enabled Innovation: drones, phones, instrumentation, robotics...
- Developed in-house design-and-build expansion board tool

**And Now Pioneers Design to Order With The Geppetto™ D2O System**
- Design from marketing requirements — *“Design in a day”*
- Product-in-hand in 3 weeks
- Platform choices: 96Boards, TI OMAP, Raspberry Pi, NXP ...
- Minimize TCO: Design, Engineering, Software, Logistics, Deployment …

**FAR MORE THAN JUST BUILDING A BOARD**
Prototypes for Software

IoT Applications: that’s your magic

Gumstix sees more designs from application engineers
   Ideation platforms

More early iterations are possible
   Low cost spaghetti prototypes (TT, BBB, Hobbyist sites)
   Low cost cases (3D printing)
   Low cost production tests (Geppetto)

Existing infrastructure support
Idea ⇒ Device Workflow

Focus on your real IP -- Application Software, Industrial Design

Design from the Product Requirements Document
- Geppetto prompts the user through requirements: red → yellow → green
- Geppetto manages the selection of modules and options
- Geppetto automates schematic, layout, gerbers, BOM, Instructions, debug …
  … and connection-to-cloud

Users get custom boards
- Custom BSP Includes Kernel (yocto Linux) Documentation
- Functional test to user requirements running Linux or NuttX
Design It... Order It... Deploy It...

D2O is the path to deployment for electronic products

Businesses: iPrint, VistaPrint, Shutterfly
Requirements: Easy Interface + Logistics of mass customization
Gumstix Geppetto: available now

“3D printers, online design tools and custom design services are all having an impact in reducing time-to-market but Gumstix’s Geppetto is leading the pack with a very low cost, very quick turn around, easy-to-use, web-based solution to board design that will be hard to beat.”

William Wong, Embedded/Systems/Software Technology Editor
Geppetto Workspace

- **Module Info**: Provides detailed information about the module, including specifications and features.
- **Tabs & Toolbar**: Interactive elements for navigating and managing project elements.
- **3D Previews**: Visual representations of the module in different perspectives.
- **Board Layout**: Illustrates the layout of the module's components.
- **Export to .STL**: Option to export the module design for 3D printing.
- **Drag & Drop Module Library**: Feature for adding or removing modules from the design.
The Vision

The magic is in the application, we make everything else easy or invisible