



"Embedding thoughts into Technology"

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## Internet enabled Paint Tint Dispenser system

Client:  
India based pioneer and market leader in Craftsmen products and Industrial Specialty Chemicals

### Requirement:

To Design and develop an embedded Control system for Paint Tint dispensing system with Internet connectivity. The Paint & Tint dispensing machine shall provide a user friendly interface for offline and online customers to assist them in selecting the type of paint, making desired shades of colors for the paint and getting the paint quantity. It is intended to have a controlling interface (GUI) and Internet connectivity for the entire painting/tinting machine. An embedded microprocessor and an I/O controller capable of controlling 70 I/O's along with an I/O expander are required.

### Solution:

Embin team has designed and developed a 32bit ARM720T with 10.4" TFT LCD display based control system and ported Embedded Linux (RTOS) with TCP/IP protocol stack to aid in the interface between the offline & online GUI and Paint Tint modules. Embin has designed and developed the offline GUI using Linux libraries and an online GUI with web based scripting language. Also the SmartCard interface is provided for logging the secured data into the system.

### Tools/Platforms:

- » Controller - 32bit ARM720T
- » LCD display - 640 x 480 TFT Sharp LCD
- » SMSC LAN91C111 Ethernet controller
- » ARM Linux
- » Xfree86
- » Matchbox window manager
- » FLTK toolkit
- » Web based scripting language