A SH-3 WinCE engine

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Abstract
A low power multichip module based on Hitachis Super-H architecture SH-3 processor and Microsofts Windows CE operating system is developed. The platform is targeted as a PDA for operation with the GPS-MS1 platform supplied by µ-blox AG.
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Introduction

Project idea from other mobile computing projects at ETH-IFE and the μ-blox AG

- Develop a low power consumer product processor platform as MCM
- Use synergies between IFE and μ-blox AG (future product?)
- Target the system to operate with existing GPS products
- Hitachi offers a ready made reference platform for development
- Partners: Hitachi, Sirf Technology Inc, μ-blox AG and ETH-IFE
Target Platform

- Personal computing platform in MCM technology
  1. Hitachi SH-3 processor and HD64461 companion chip
  2. Memory subsystem
  3. User interface
  4. Communication interfaces, I/O

- Considerations for a Consumer Product
  1. Small form factor
  2. Low energy consumption
  3. Possibilities for user-extensions
  4. Component count, substrate type
  5. Price

- GPS-MS1 Integration
Hitach Super-H System Architecture

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SH 7709 Chip Set Block Diagram
Goals

- Develop a low power MCM design for a Hitachi SH-3 system
- Evaluate the numerous ways to integrate GPS functionality
- Prepare a demo on the SH-3 evaluation platform with a GPS-MS1