



*Mobile Computing made for You*

*Presented by*

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**NEW WAYS TO  
EMPOWER INDONESIA  
WITH INTERNET & ICTs  
CONFERENCE  
AUG 26, 2003**

- **Simputer – The Motivation and Beginnings**
- **Encore Technologies – Commercialization Role**
- **Simputer as a Platform**
- **Early Examples**
- **Initiatives on the roadmap**



# **The Bangalore Declaration on IT, 1999**

- “Facilitate the availability of a range of computers, including cable-TV, modified telephone instruments, **and rugged, low-cost, hand-held devices, along with traditional computers, for purposes such as information gathering, communication and transaction processing**”
- “Avoid blind transplants of I.T. solutions, proven in other infrastructural and cultural contexts, and instead, **nurture local expertise that can adapt I.T. solutions to meet local requirements.**”
- “Devise measures to **create thriving markets for local language content and applications**”

**The story of the Simputer began at a similar forum four years ago**



# IT for Bridging the Digital Divide – Simputer Design Considerations

- Simple, easy to use, low-cost
- Independent of mains power
- Rugged, dust-resistant
- Shareable
- Meaningful, must make an impact on daily life
  - Education
  - Earning a living
  - Communication
  - Entertainment
- Innovative use of hardware and software to develop *uniquely local solutions for uniquely local needs*



# Simputer at a Glance

- Handheld device, designed to be shared
  - Smart card facilitates personalization and security
- Simple to use
  - Icons, Graphics, multi-lingual text
  - Voice Feedback in Local Languages
- 2x AA batteries (rechargeable)
  - commonly available anywhere
- Rich in interfaces
  - Built-in modem
  - Smart Card
  - Infra-red Data Access
  - USB port
  - Audio



## Ease of Use

- Images and sound primary output
- Touch is the primary input
- Multilingual text output and input possible for literate users
- Not restricted only to the English educated and elite



# Encore Simputer



**Nov 2001 Lab Prototype**

“Innovation of the Year 2001” – New York Times.

Applauded and featured in BBC, CNN, Time Magazine, Fortune Magazine, National Geographic, Asia Inc Magazine and numerous other forums and publications



**2002-2003**

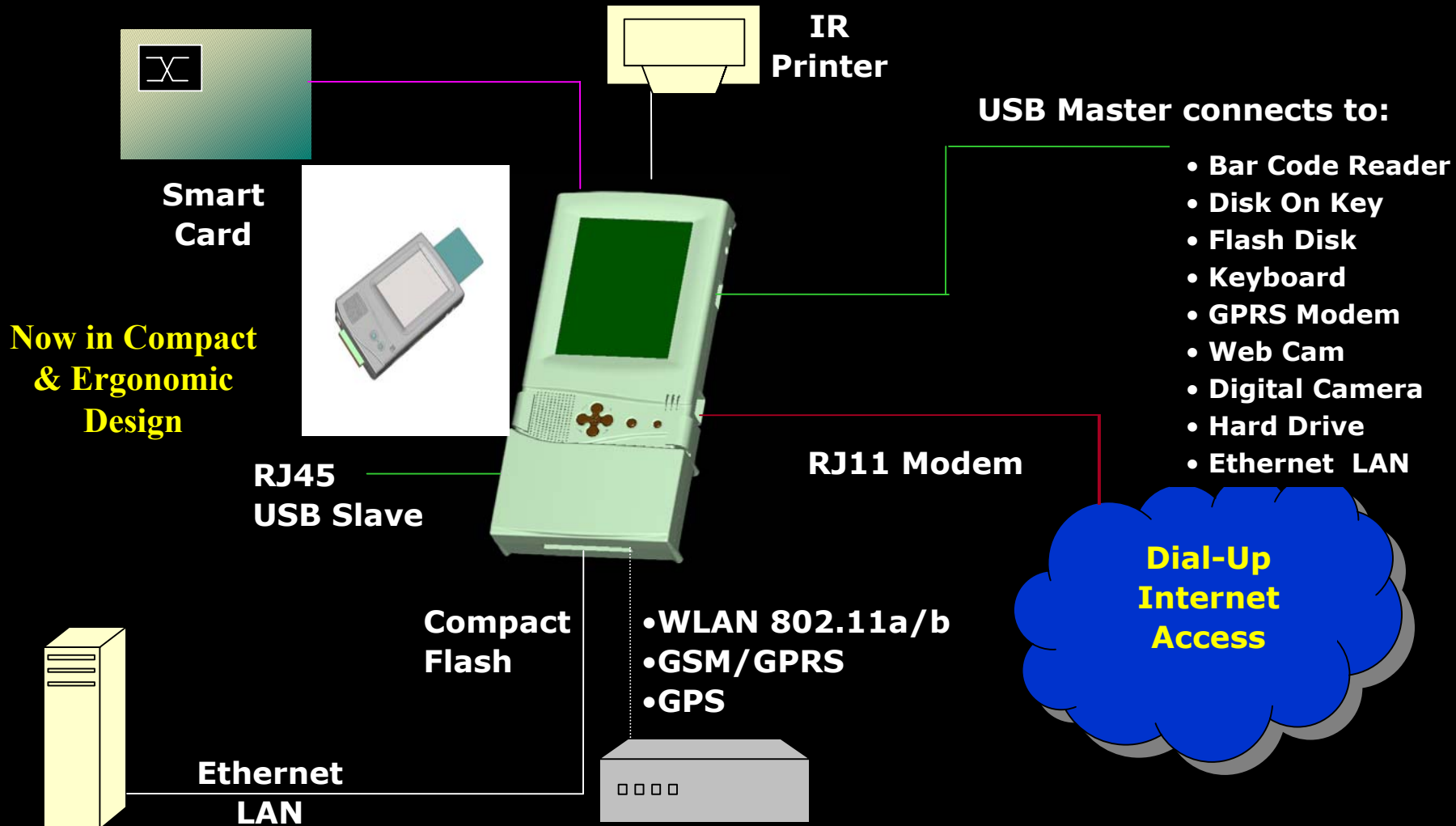
**Field Prototype  
with Base Unit and  
Expansion Cradle**



**Sept 2003 – Mass Production Version  
Now Market Ready**



# Most Versatile Hand-held Computer in the market today





# Encore Technologies (S) Pte. Ltd.

- Established in Feb 2002 as a Joint Venture between Singapore based Time2Talk Pte Ltd and ESL
- Building a global community to deliver value in core sectors of economies and leveraging strengths of all members of the community
- Focused on Industry Vertical Applications for Mobile Users in Enterprise & Institutional Markets

***Vision – Be a leader in Application-specific Mobile Computing in the industries we serve***







# Our main constituents & roles

- Intellectual Property rich Indian R&D house chooses Singapore as “commercialization hub”



- Encore Technologies (S) responsibilities
  - Marketing road map and partner relationships
  - Commercial Manufacturing
  - R&D plans, product collaboration plans



- Encore Software responsibilities
  - IP Support for Commercialization
  - R&D Execution



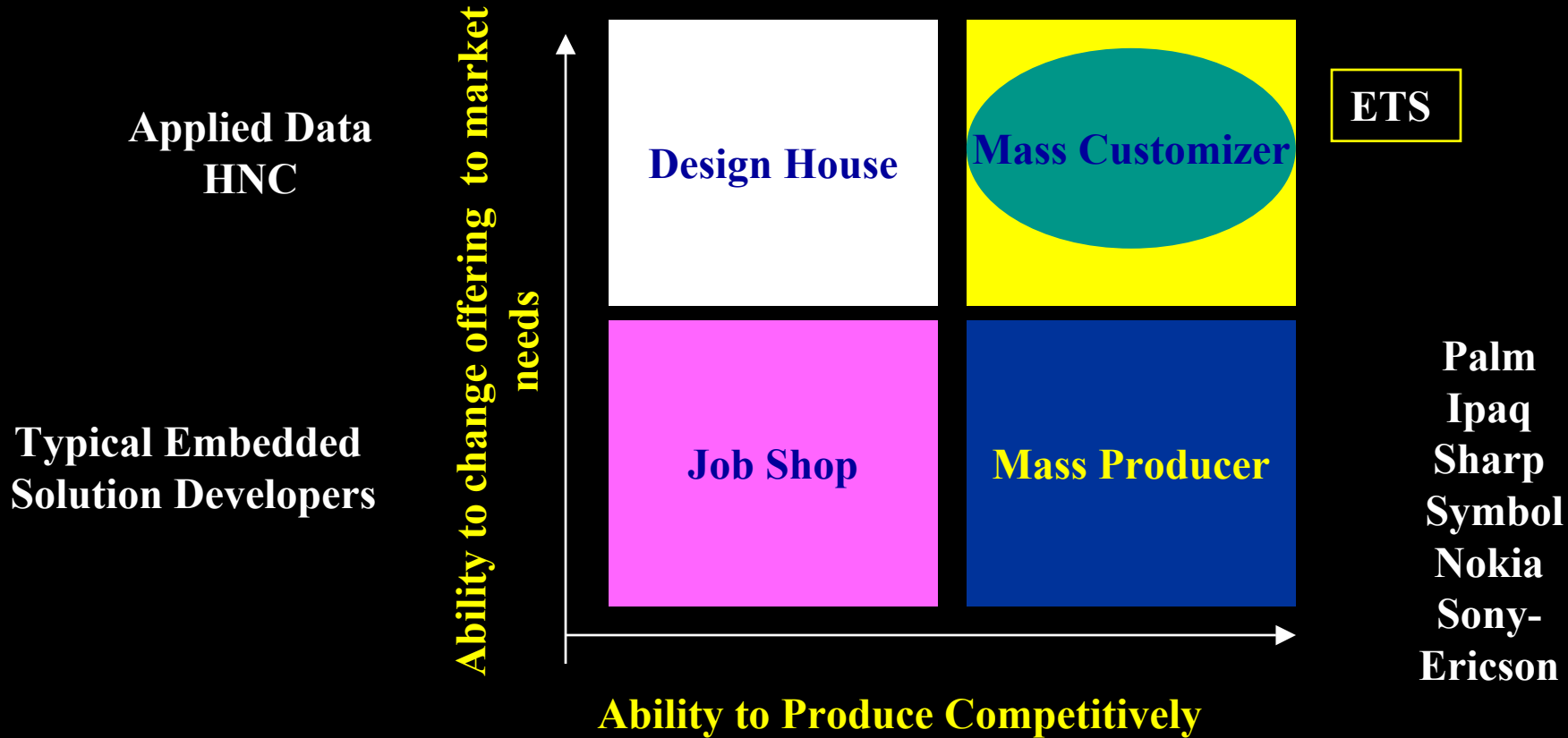
# Simputer – Commercialization Considerations

- Identify & satisfy unique requirements for computing faced by Governments and Enterprises
- One size does not fit all
- Different application needs have different design considerations
- Our unique value proposition is to provide a tailor-made solution
- With a sound technology base, we can offer Simputers in many form factors, many price points

**Paradigm Shift from Product to *Platform***



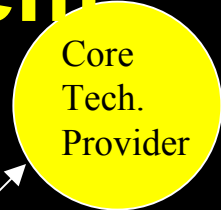
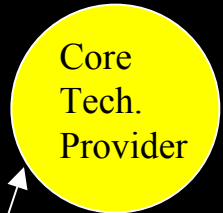
# Finding our niche in the Mobile / Embedded Computing space





# Our Partnering Eco-System

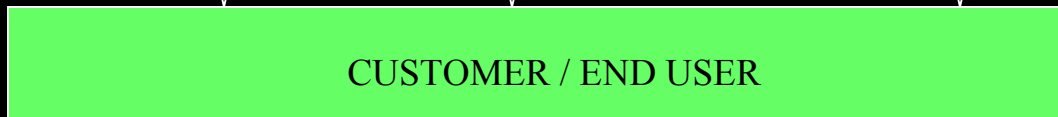
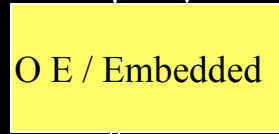
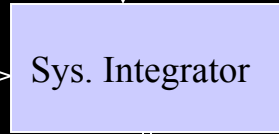
**R & D  
Technology  
Standards and  
Support.**



**Manufacturing  
Marketing and  
Alliance Mgmt  
Training  
Services**



**Application  
Development &  
Customisation  
Channel Sales  
Customer Support**

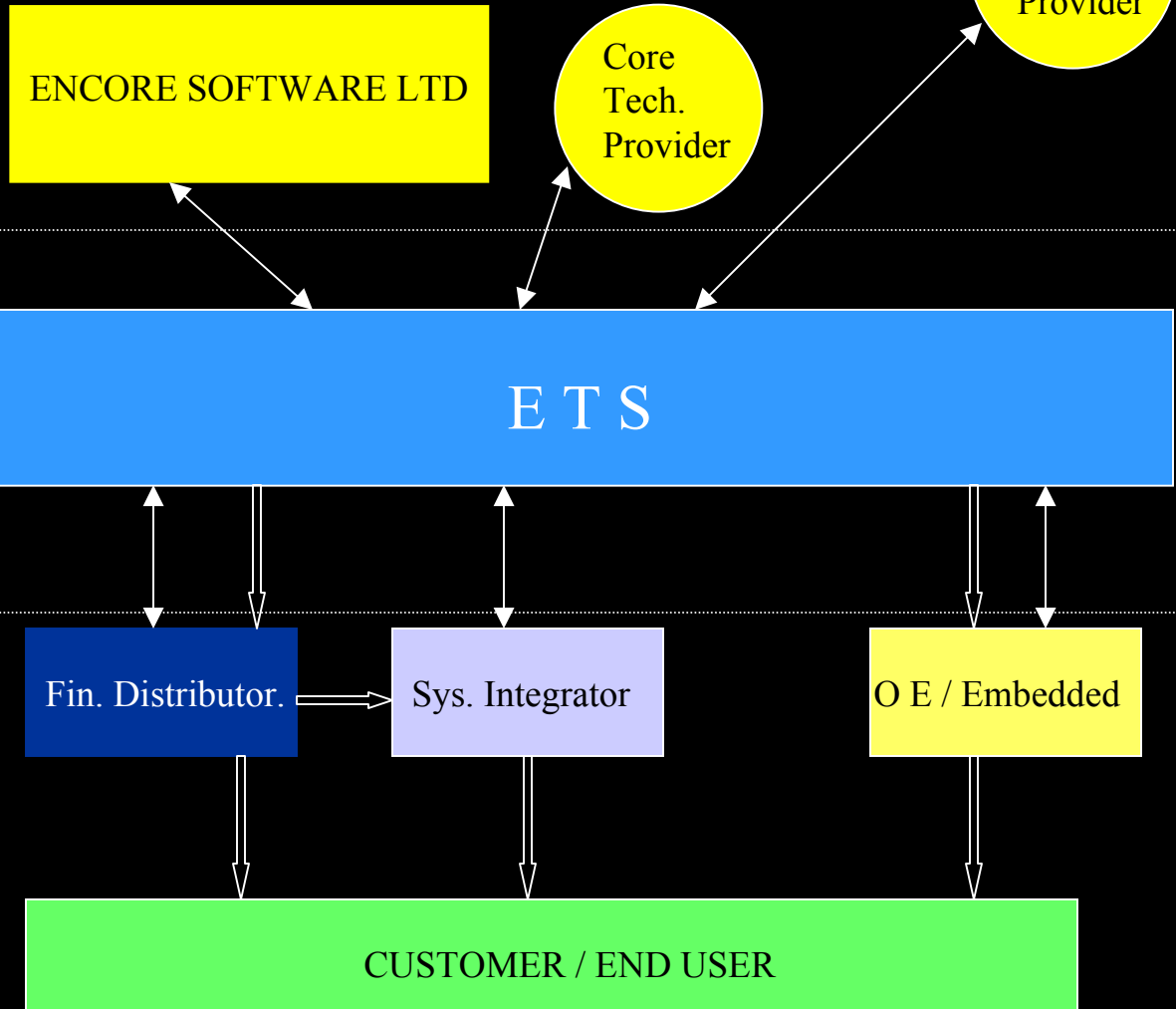


Activities

Organisations

⇒ Channel Sales

↔ Tech. Support



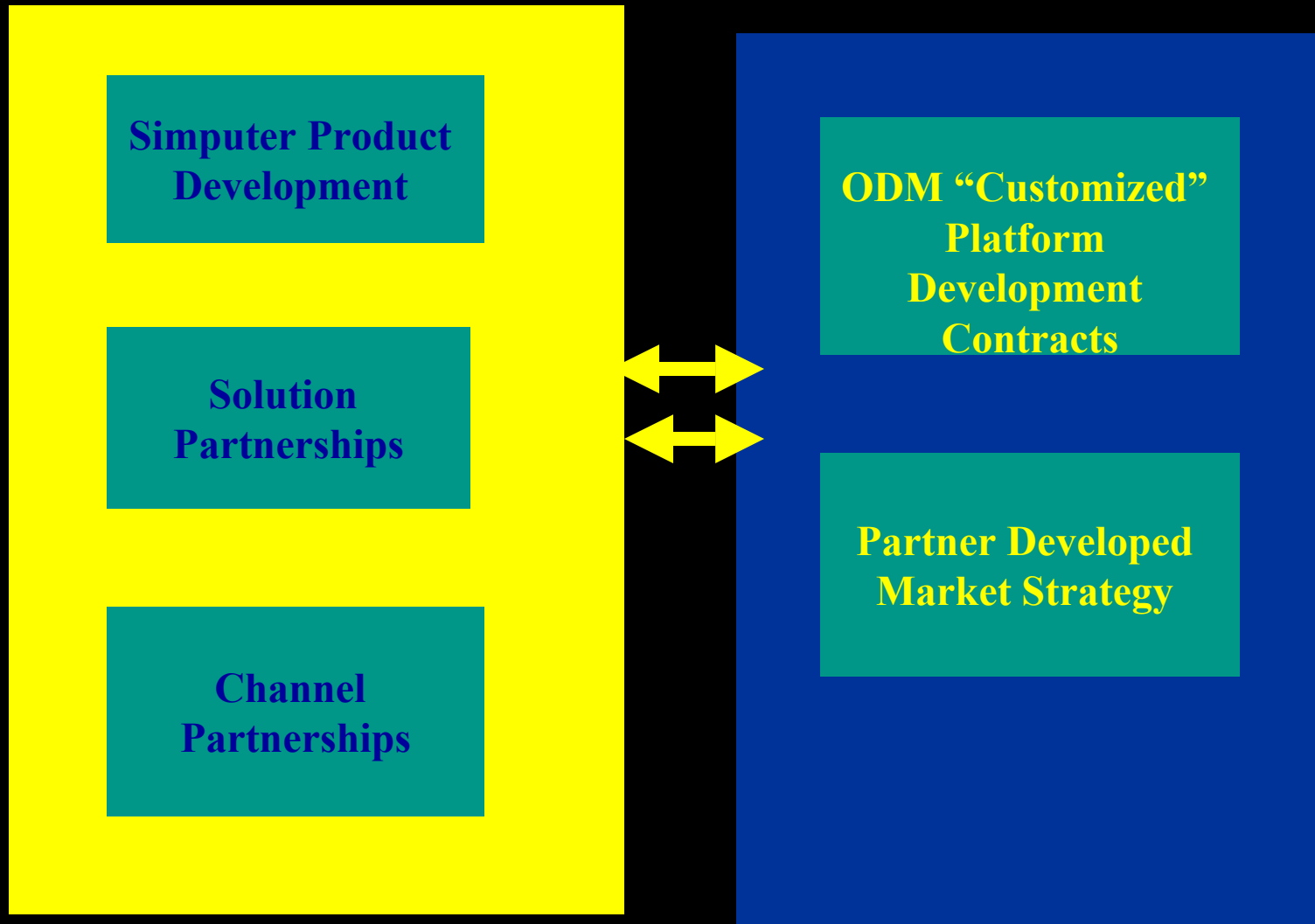


# Building a community around the Simputer

- Partnering with software developers to build tailor made solutions for many verticals
- Modifying hardware for different needs – design partnerships
- Supporting wide variety of peripherals – value adding to other products
- Cross leveraging opportunities for partners
- Fostering partner collaboration through communication & joint initiatives
- Built a partner solution portal  
[www.simputerland.com](http://www.simputerland.com) to showcase solutions and bring partners together



# New Business Approach





# Simputer Product Development Roadmap

- Handheld Solutions
  - Multiple Screen Sizes
  - Multiple Interface Options
  - Multiple Wireless Connectivity Options
  
- Embedded Solutions
  - Industrial Device Controller
  - Internet Camera Blackbox
  - Wireless Terminal
  - Linux Thin Client Terminal



# Simputer – Meeting many unique requirements with unique solutions



**Smart card to meet authentication, personalization and Financial transaction needs**

**Monochrome and Color with touch screen. Meet many application requirements and budgets**

**Microphone & Speaker. Full fledged audio support including recording**





# Interface Options to meet any requirement



**USB Host.  
Multiple USB  
devices  
supported**

**Multi-I/O Port  
USB connection to PC  
Connection to Serial Protocol Devices &  
Expansion Sleeves  
VGA Connection to Display or Projector**

**Audio Jacks**



# Cost Effective Energy Solution



**4- 6 hrs battery life on 2 AA NiMH rechargeable cells**  
**Solar Powered Battery chargers available for NiMH**  
**batteries**



# Multiple Options for Wireless Connectivity



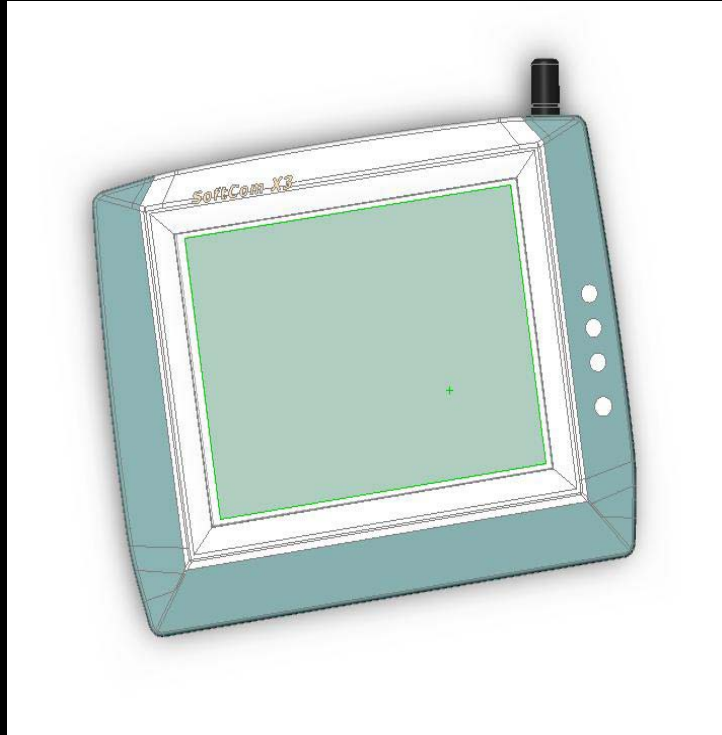
**Add-on Wireless LAN and GSM/GPRS/CDMA Modules in CF Form Factor**

**Built-in Wireless Modules in select models**

**Connectivity solutions to interface Internet connectivity capability available in mobile phones**



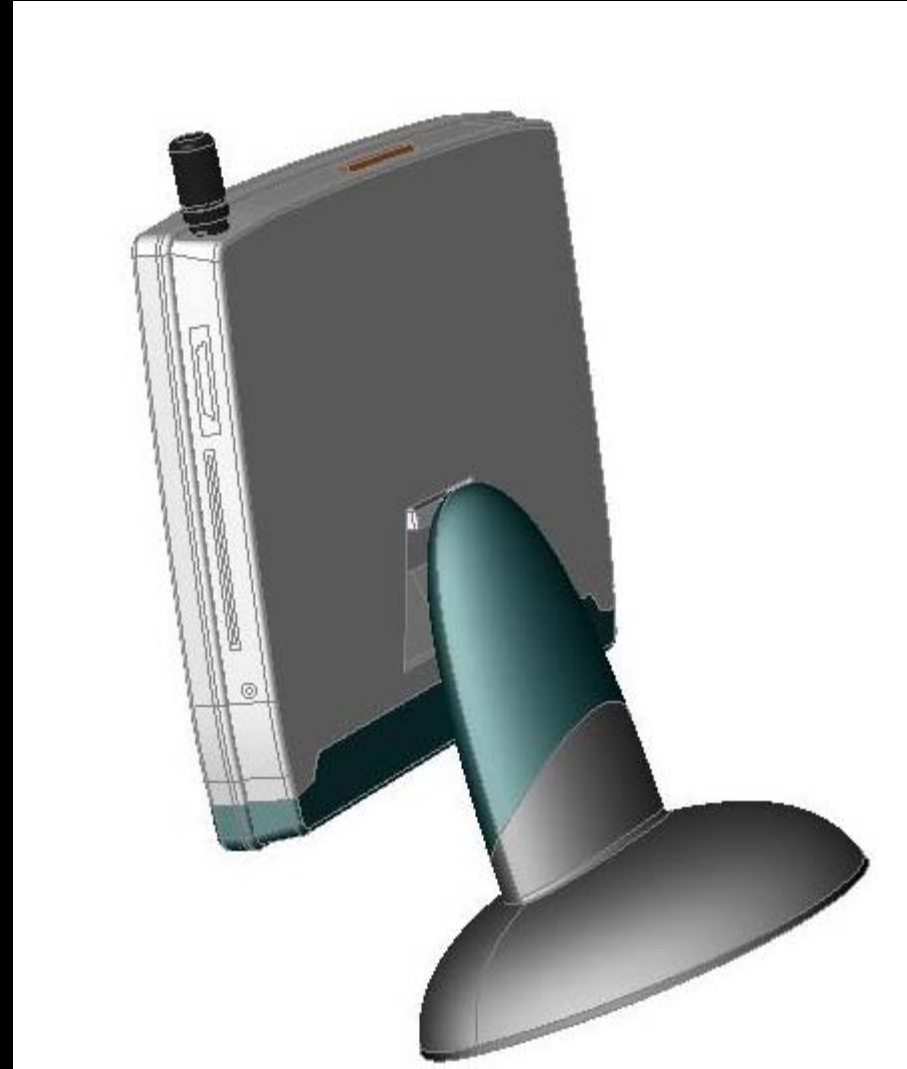
# Multiple form factors to meet different needs



**Tablet Version to meet requirements in eLearning, Healthcare, Hospitality, Logistics**

**8" Screen. Portable Device + Docking Station.**

**Target to launch – Q1 2004**





# Flexible Design & Ergonomic Solutions



**Multiple Wireless Options**

**Wireless LAN**

**GPRS/GSM/CDMA**

**GPS**

**Slim & Lightweight - < 1Kg**

**More than 10 hrs battery life**

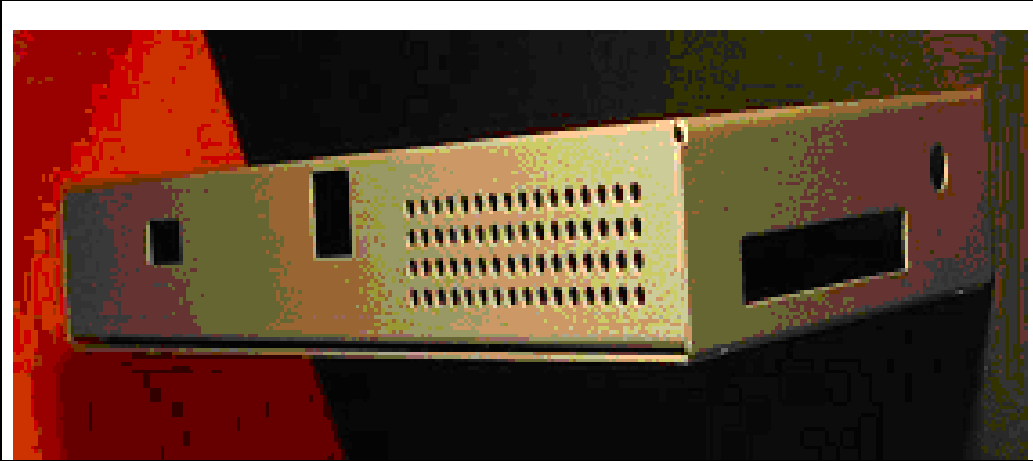
**Rugged**

**Standard Interfaces –  
keyboard, mouse, Ethernet  
network, Dial-up modem in  
Docking station .**

**Full functionality of Notebook  
computer MINUS COST  
MINUS BURDEN**



# Simputer Embedded Device Controller



**Remote Monitoring Solution for US MNC  
No LCD Screen.**

**Integrated Web Server and FTP Server**

**Secure Remote Log-in**

**“Minimal” Server – Small Foot print,**

**Low Cost**

**Can be Embedded in any Microprocessor  
Controlled Equipment for “Device Networking”**



# Current Initiatives

*Mobile Computing made for You*

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# Pioneer Implementations in process

- Government Land Records Updation & Crop Data Collection, India
- Utility Meter Reading & Billing, India, Mauritius
- Field Statistical Surveys, Malaysia
- Loyalty Card Programs, Saudi Arabia & India
- Community Health Care, India & Africa
- Logistics Solutions – Japan, Singapore, India
- Traffic Police, Offense Management
- Health Care Solutions, Singapore
- Asset Tracking & Management , Malaysia
- Online Learning, Singapore, India, US
- Remote Maintenance, USA, Japan





**WWW.SIMPUTERLAND.COM**

ENTER A FUTURE OF ENDLESS POSSIBILITIES