

IGLOO AND SNOWBALL

Philippe Garnier –Ecosystem program

SophiaConf 
2011 Du 4 au 7 juillet

Open Data Frameworks Scrum Agilité
EXI IGLOO Community **Android** Informatique
Honeycomb3.0 Mobile Platform Open Source
Open Géo Data Tablettes Applications



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MOBILE IS THE CONVERGENCE POINT

Smartphone growing at an average range of 20% per year

Growing interest in Tablets after the launch of Apple iPad

Over 3 billion iPhone applications downloaded

GPS penetration doubled in past 2 years



CONSUMER ELECTRONICS IS A STRONG GROWTH DRIVER

HIGHEST-PERFORMANCE APPLICATION PROCESSORS



For powerful and cool
devices

NOVA™ A9500

- 1.2Ghz dual-core application processor
- Powerful graphics engine
- 1080p camcorder
- Up to 20 megapixel camera

Industry leading performance and power

For Passionate Penguins' who are exploring new horizons,...

There is a warm social place to be...





Open Source community

Based on Open Source Mainstreams and distribution channels - Linux, Linaro, Android, Ubuntu, MeeGo

Catalyst for innovation

Customers and partners in various domain as; hardware and software services, tools, applications, research and so on

Easy access

Interactive web portal, affordable developer kits

ST-ERICSSON IS AN IGLOO PARTNER

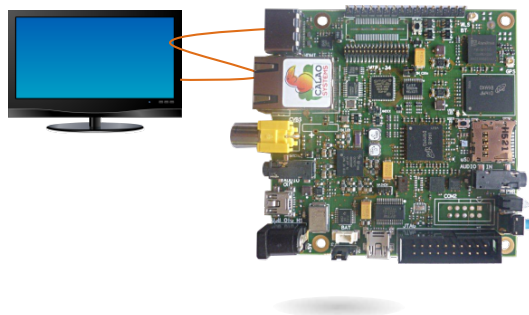
DEVELOPERS IGLOO



Accelerating your innovation to a Market ready Solution

SW Development Kit

Product Development Kit



- Software development
- Technology access

- Product Prototyping
- Professional quality level
- Application kits (Tablet, modem..)

- Product
- Distribution channel
- Production

SNOWBALL



Full Connectivity

GPS, Bluetooth, WiFi,
USB, HDMI
HSI modem i/f

Multimedia

3D Graphics, HD video,
audio

MEMS

Barometers
Magnetometer,
accelerometer, 3D
gyroscope



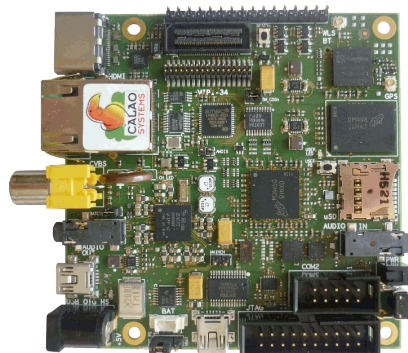
Processors

Dual A9 2x1GHz
DDR2 1GByte
Low power
consumption

Battery operated
USB powered
USB charging
Backup battery


Professional quality level

Embedded eMMC.
Display, Imaging and System
Extension
JTAG , MIPI debug
Small size 85x85
Platform testing tools



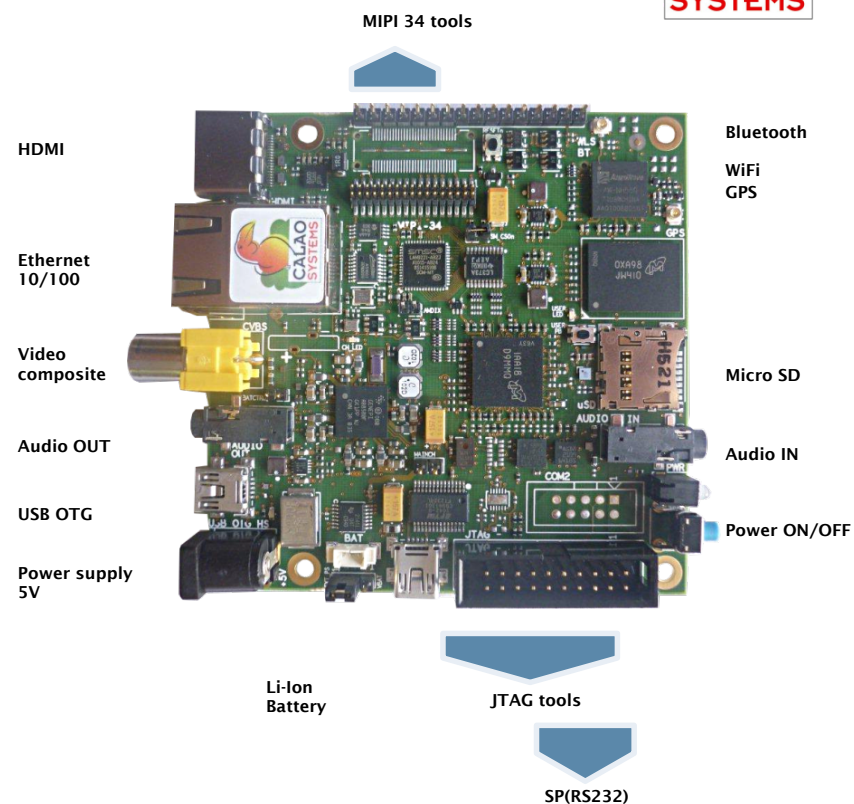
SNOWBALL



Differentiating FEATURES	SNOWBALL-SDK	Competition A	Competition B
CPU/DDR2	Dual A9, 2x1GHz/ 8Gb	<i>Dual A9, 2x1GHz/ 8Gb</i>	<i>Dual A9,2x1GHz/8Gb</i>
On board eMMC	4GB	<i>NO</i>	<i>0.5GB</i>
Extension connectors	YES	<i>NO</i>	<i>Yes</i>
MEM Sensors 	<ul style="list-style-type: none"> - Barometer - Magnetometer - Accelerometer - 3D gyroscope 	<i>NO</i>	<i>NO</i>
Connectivity	WiFi, BT	<i>WiFi, BT</i>	<i>WiFi, BT</i>
GPS	YES	<i>NO</i>	<i>NO</i>
USB operated	Yes if battery operated	<i>NO</i>	<i>NO</i>
Battery operated	YES	<i>NO</i>	<i>NO</i>
Professional tools	JTAG and MIPI DEBUG	<i>Only JTAG</i>	<i>Only JTAG</i>
Usable in Product	YES	<i>NO</i>	<i>NO</i>
Small size	YES (85x85)	<i>NO (110x114)</i>	<i>NO (>150x200)</i>
Target Price	\$200	<i>\$174</i>	<i>\$399</i>

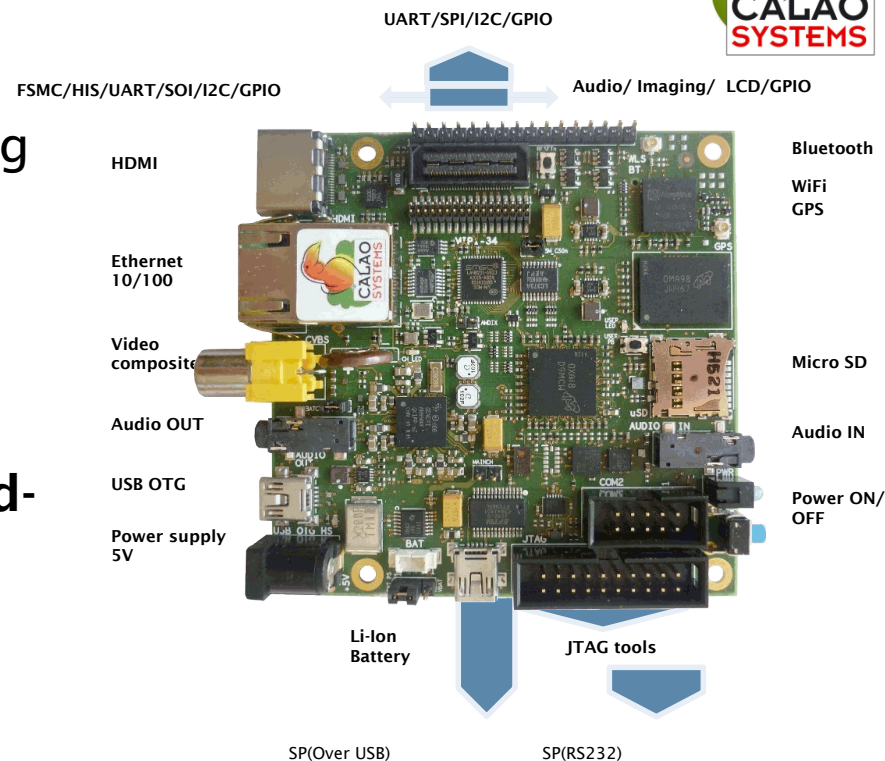
SNOWBALL SDK

- **SNOWBALL SDK** is the Software Development Kit
- The SDK is a full featured **SNOWBALL**
- **SNOWBALL SDK** is available at a target price of only \$200, thanks to the sponsored components from partners
- **SNOWBALL SDK** is designed for prototyping and SW development, **not for end products**



SNOWBALL PDK

- **SNOWBALL PDK** is the Product Development Kit
- Professional quality design including ESD protection, EMI filter, on-board eMMC, professional extension connectors and small size
- Using the PDK as a module allows users to prototype and **develop end-products**
- For your own dedicated design, our components may be found in distribution channels



SNOWBALL PDK's ADD-ON BOARDS



- A Tablet kit Snowball based with Touch Screen Display add-on boards is in development for this

- 10.1 inch using capacitive multi-touch technology

- Modem board using ST-Ericsson's leading thin mobile broadband modems

TAB-S9500-ULP-C01 (aka SNOWBALL TABLET)

The TAB-SKY-S9500-ULP-CXX is a tablet development platform based on the Snowball PDK and a graphic expansion card that targets hobbyists and professional developers wanting to prototype new GUIs. It will help developers create applications for Android, MeeGo and Ubuntu.

3D Camera Module with MEMS Microphones

ARM
Cortex
Low Power Leadership From ARM
Dual Cortex A9

Mali
Mali 400 GPU

10.1" TFT LCD (WSVGA 1024x600)
+ Projected Capacitive Touch Screen

1GByte LP-DDR2

8 GByte e-MMC

Linaro

ubuntu

android

MeeGo

Snowball PDK

Developer's **IGLOO**

<http://www.calao-systems.com> - <http://www.calao-store.com>

Snowball Graphic Card

SOON

- “Smart home” boards including ST-Ericsson’s 2G modems
- Your boards!



UNLEASH YOUR CREATIVITY THANKS TO EXTENSIVE EXTENSIONS

SNOWBALL DISTRIBUTION

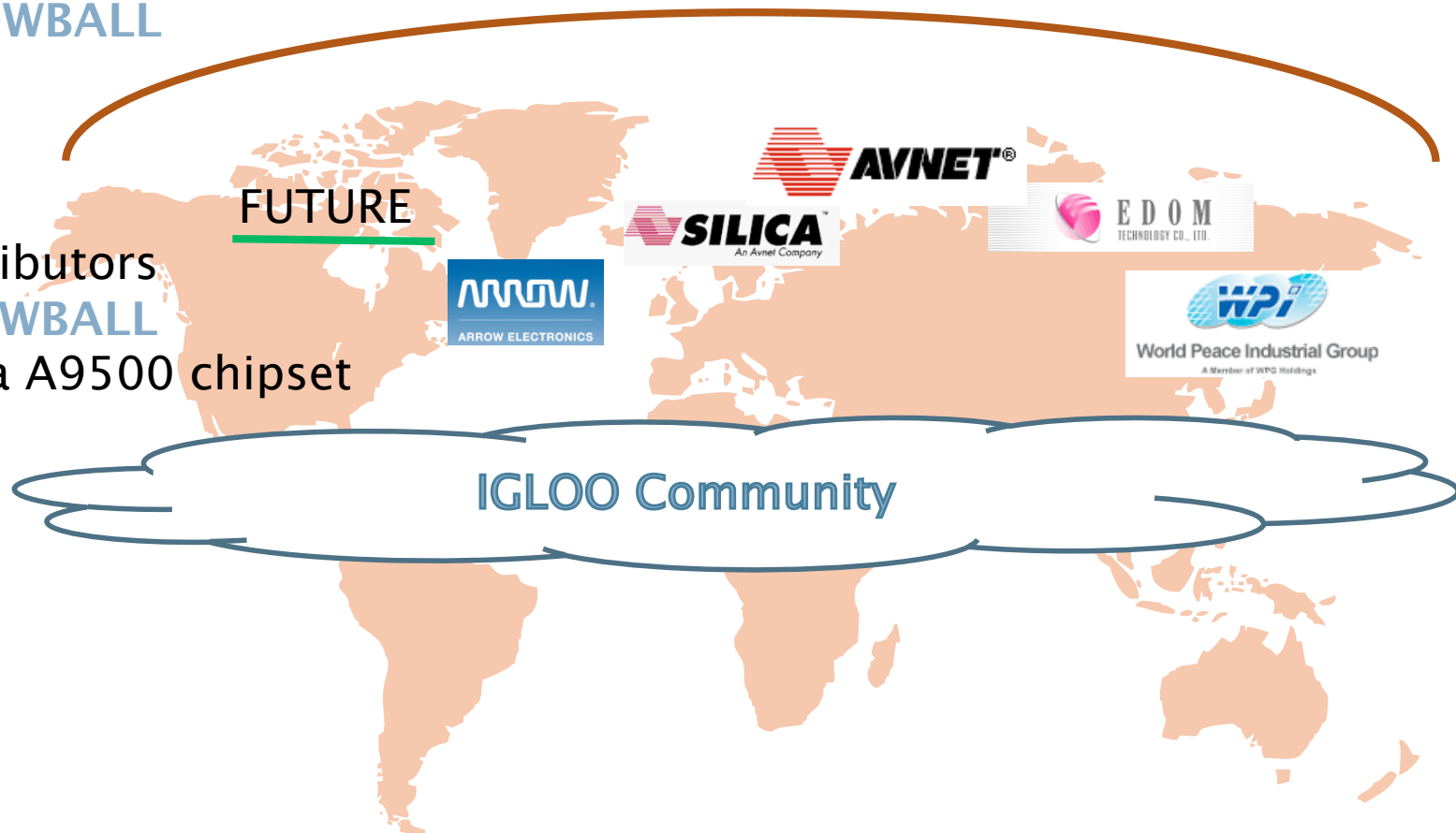


Worldwide distributor

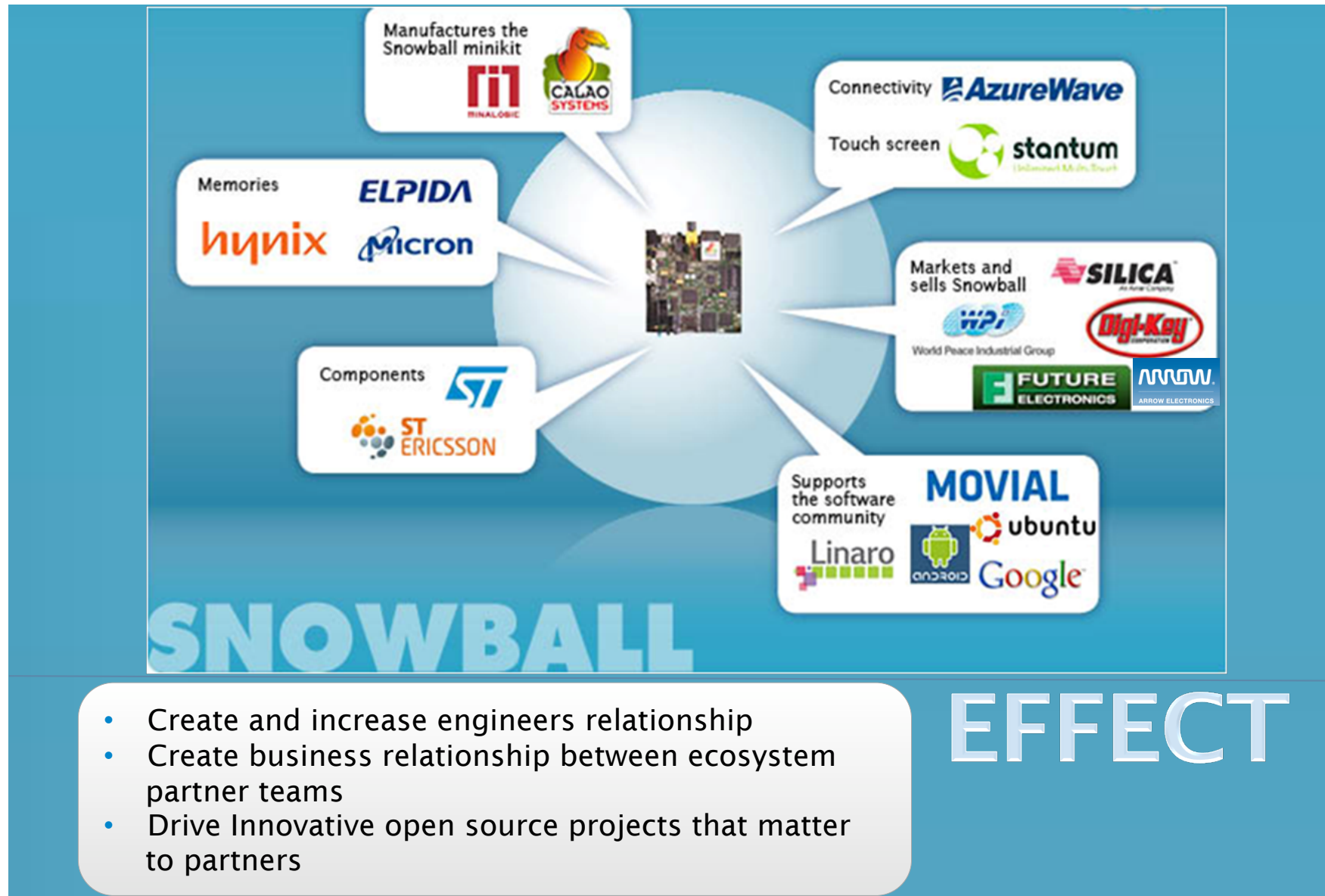
- For **SNOWBALL**

Local distributors

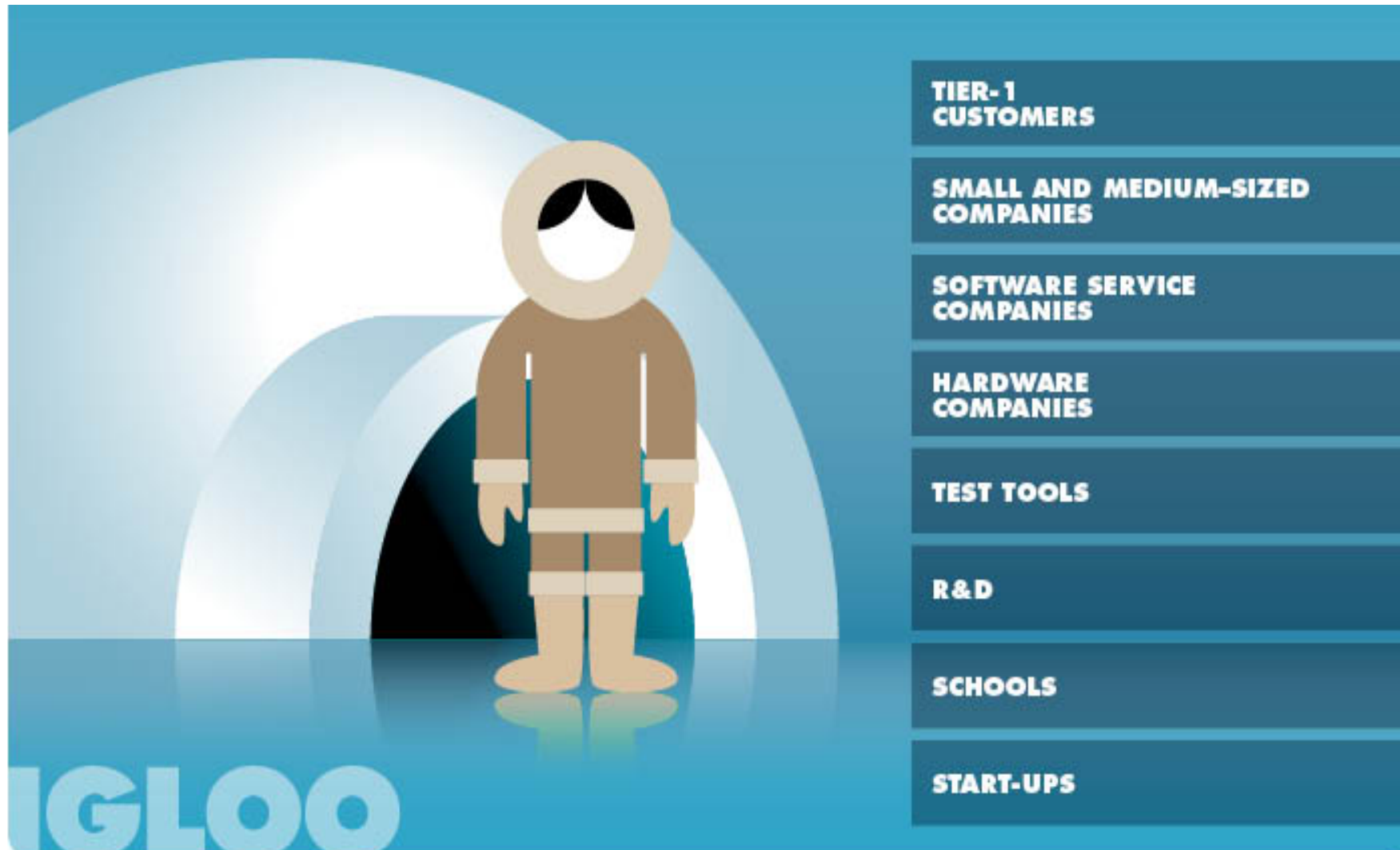
- For **SNOWBALL**
- For Nova A9500 chipset



THE SNOWBALL EFFECT



IGLOO DEVELOPERS



DISTRIBUTORS



SMALL AND MEDIUM-SIZED COMPANIES

Community
Support

The
USERS



PARTNERS

PROFESSIONAL SERVICES

SOFTWARE SERVICE COMPANIES

MOVIAL

HARDWARE COMPANIES



TEST TOOLS



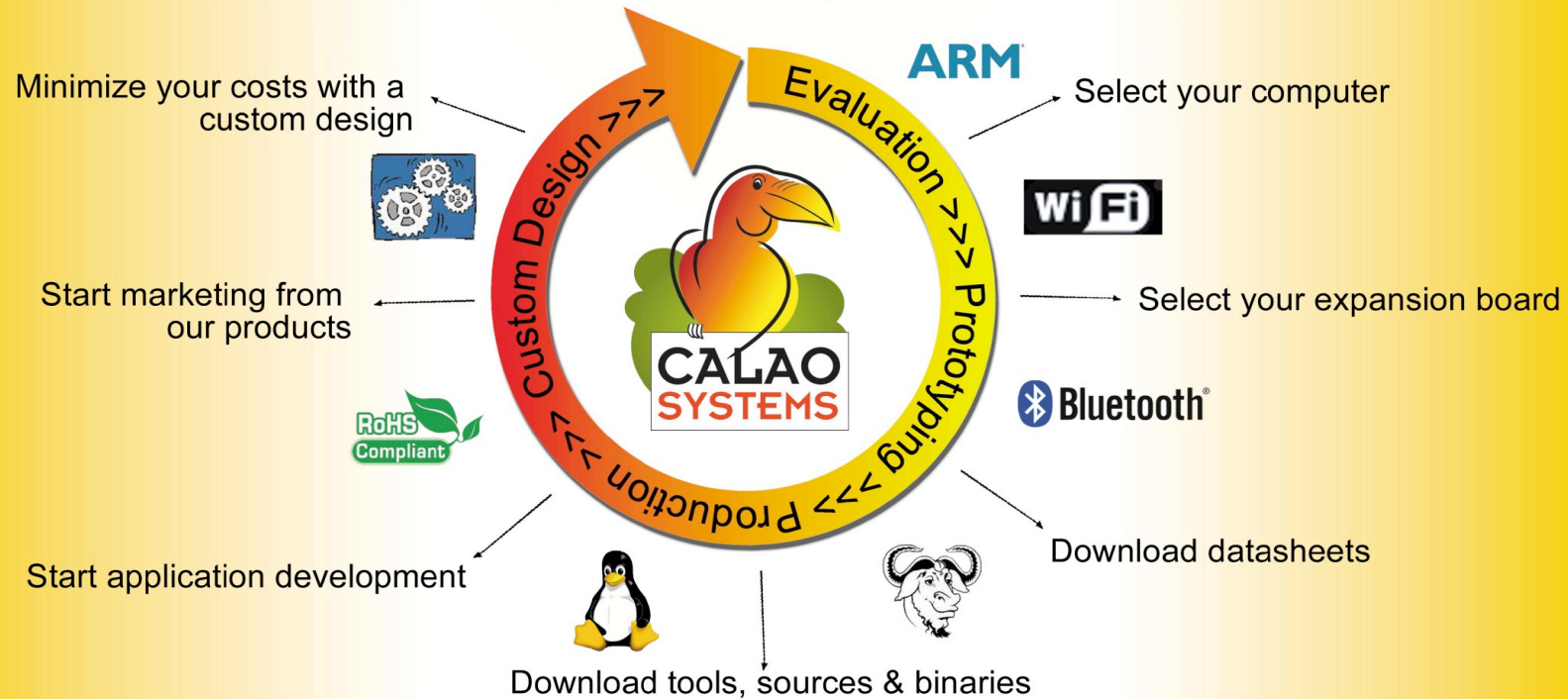
- Blog
- Forum
- Documentation
- Link to relevant web site partners for SW and HW

- Customization and development
- Application integration
- Support services
- Design or CAD transfer

Embedded and Network Computing Technologies

Calao Systems Offers Low Cost Embedded Systems Design with
Fast Turn-Around Time, Quality & Support

Accelerate your design with our ready to use embedded modules!



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IGLOO SOFTWARE PARTNERS



Movial Designs, Develops and Delivers

Movial Corporation
Porkkalankatu 20
FI-00180 Helsinki

www.movial.com



Precision Engineering Support for IGLOO

Support Services

- Consulting Services
- Android Services
- MeeGo Services
- Ubuntu Services
- Qt Services
- Training & Support

UX Design Services

- User Experience Design
- Performance optimization
- Interaction Design
- Research and Testing
- Audiovisual Design

Application Integration

- Internet browsing
- Media player
- Flash 10 Services
- AIR 2.5 Services

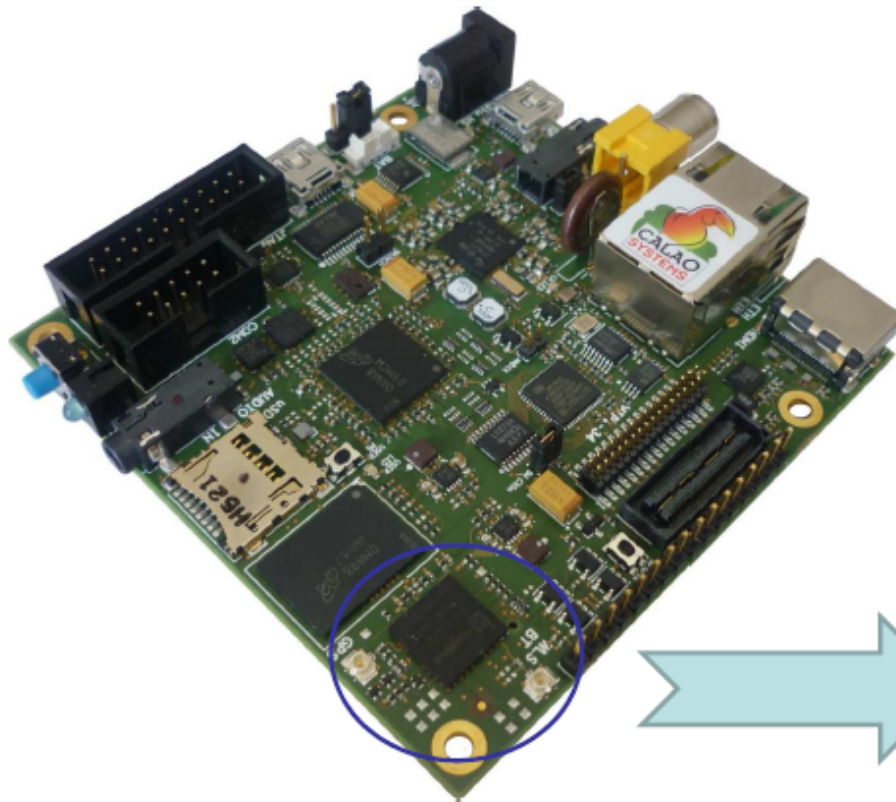
MOVIAL

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IGLOO CONNECTIVITY PARTNERS



AW-NH58x in SNOWBALL



GPS

abg Wi-Fi n

Bluetooth®

FM

- WWW.IGLOOcommunity.org
- Your dedicated Web site to interact within the community
- A place for the Technical community to support your project
 - Blog
 - Forum
 - Documentation
 - Link to relevant web site partners for SW and HW
- A place for Innovation
- A place to promote your innovation and take benefit of your added value into the community

CREATE AND PROMOTE YOUR INNOVATION



Kernel and BSP
SW tools
Ubuntu specific

ubuntu[®]



Android Specific

WWW.IGLOOcommunity.org

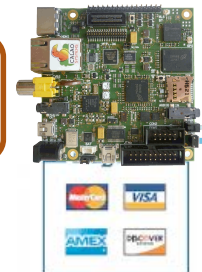


- Wiki, Forum, IRC
- SNOWBALL projects

IGLOO Partners
Your Contribution

SKY-S9500-ULP-Cx1

Distributors



SNOWBALL
Board
HW documentation

ST
ERICSSON
Website

Nova A9500 Chipset documentation
Optimized IP
Advanced functionality



Kernel.org



ubuntu



2.6.35

2.6.38

Continuous
Mainlining

Multimedia

10.11 - SNOWBALL HW PACK

11.5 - SNOWBALL HW PACK

Multimedia

Gingerbread 2.3

Gingerbread 2.3

UBUNTU 10.10

V1.2

V1.2

License

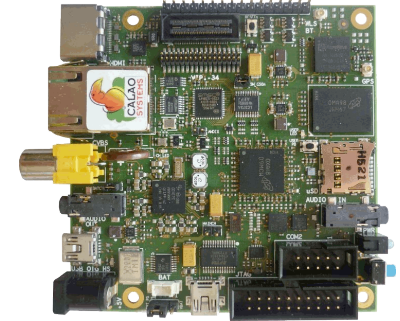


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 - The Licensee is entitled to flash the Software on a commercial product

THE LICENSEE IS ENTITLED TO FLASH ON A COMMERCIAL SNOWBALL PDK BASED PRODUCT

- Any use of the Software is solely and exclusively used on the Snowball Kit.

- Get your **SNOWBALL** –
 - The first ST-Ericsson Nova A9500 dual-core application processor developer board
 - Very rich feature set in an amazingly small size: **GPS**, **MEMS** (gyroscope, Magnetometer, accelerometer, barometer). **Battery operated** mobile product
- Experience a full product development cycle :
 - from software development to embedded product application with the most complete, feature-rich, inexpensive developer board accelerating system and software innovation
- Valorize your innovation on the **IGLOO** community:
 - Igloo – a powerful open source community for mobile innovation to facilitate and support collaboration and sharing



SNOWBALL– a catalyst for cutting-edge mobile innovation

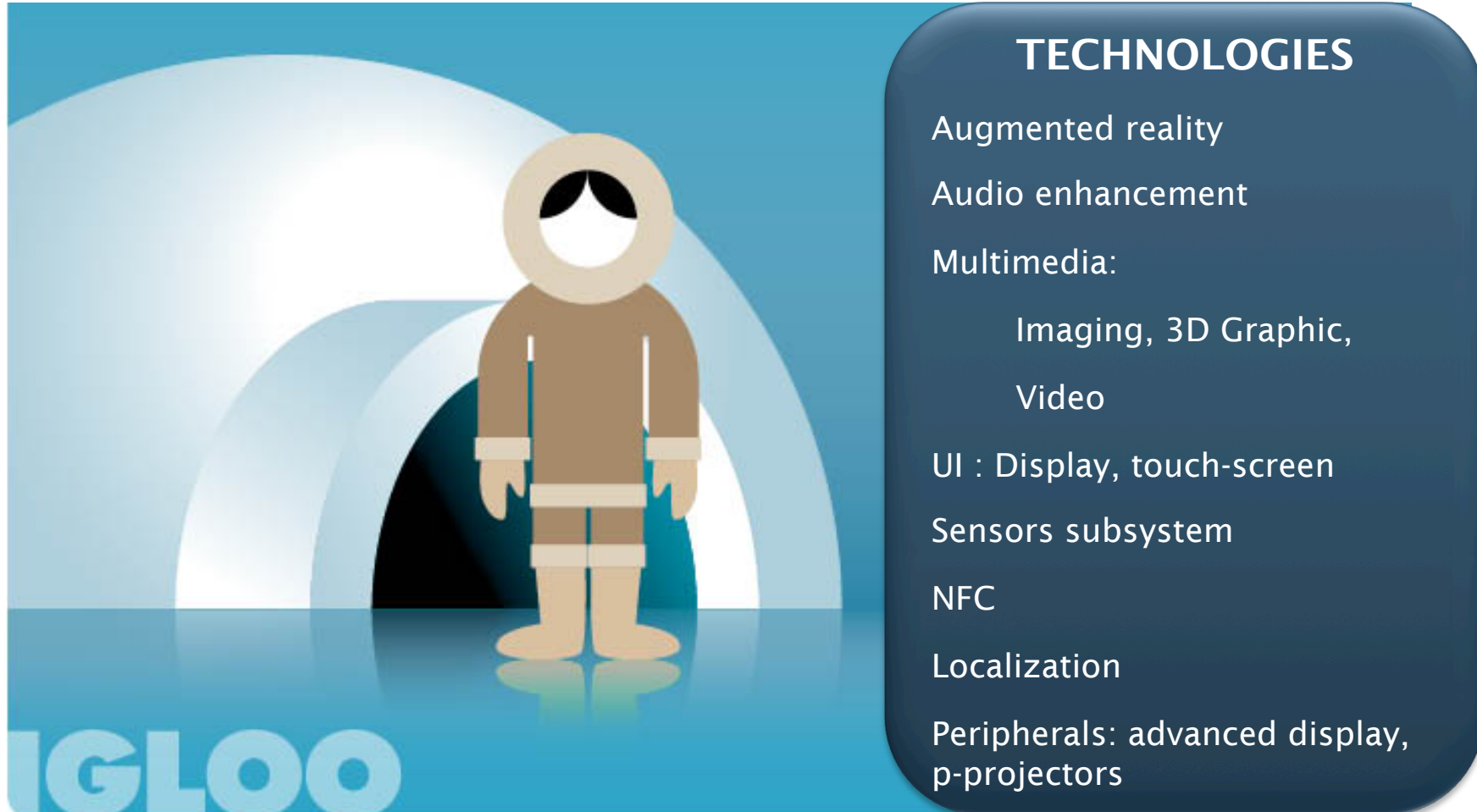
ST-ERICSSON as IGLOO partner

A graphic for the IGLOO application. It shows a stylized, brown, hooded figure standing in front of a large, white, arched structure that resembles an igloo or a tunnel entrance. The background is a solid blue color. The word "IGLOO" is written in large, light blue, sans-serif letters at the bottom left of the graphic.

APPLICATION

- Smartphone
- Tablet
- Connected Consumer Electronics
- Localization
- Gaming
- Entertainment
- Mobile Health

ST-ERICSSON as IGLOO partner



ST-ERICSSON as IGLOO partner

An illustration of a person in a brown, full-body protective suit with a hood, standing in front of a large, white, dome-shaped structure that resembles an igloo. The person is holding a blue bag. The background is a solid blue color. The word "IGLOO" is written in large, light blue, block letters at the bottom left of the illustration.

SOFTWARE ARCHITECTURES

Khronos APIs: Open CL, open GL...

API s (Sensor, NFC,..)

Linux OS:

- Android
- Android low cost.
- QT

Proprietary OS:

- WP, IOS, QNX



www.igloocommunity.org

