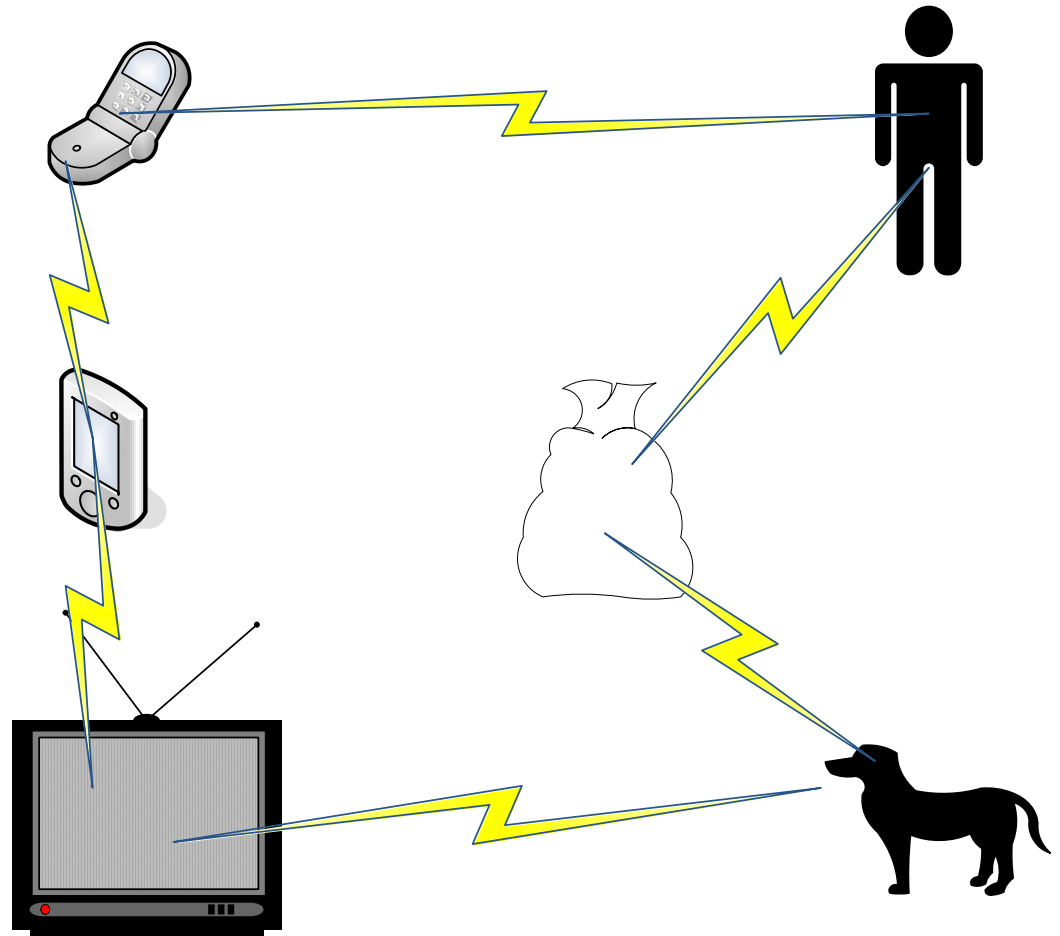


# FIND YOUR “LOVED ONES” FOR \$1

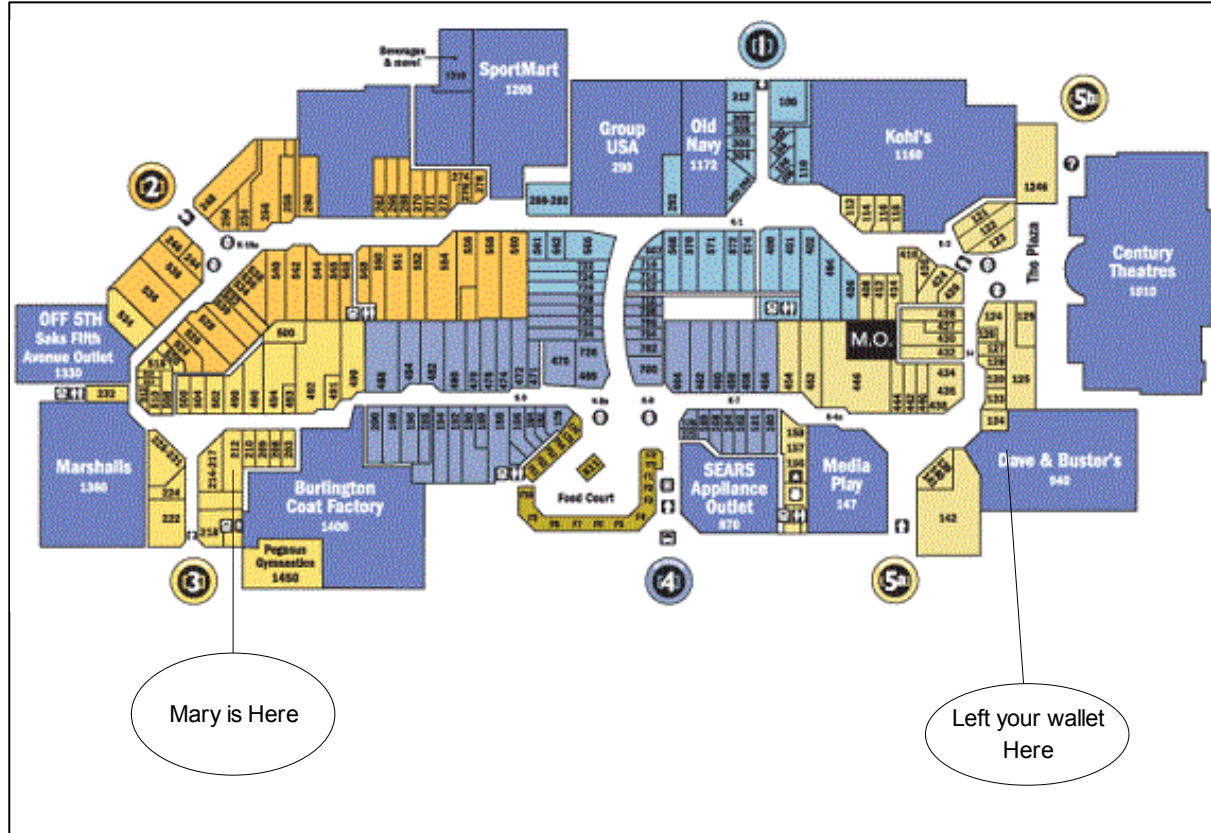
In-Building Location with LPS  
(Local Positioning System)



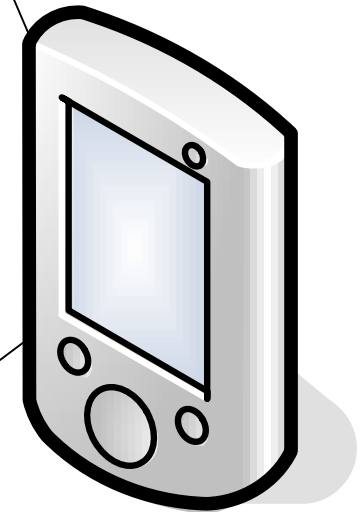
**Æther Wire & Location, Inc.**

Patrick Houghton – CEO  
patrick@aetherwire.com  
(408) 400-0785

# Show Things and People on Mobile Phone

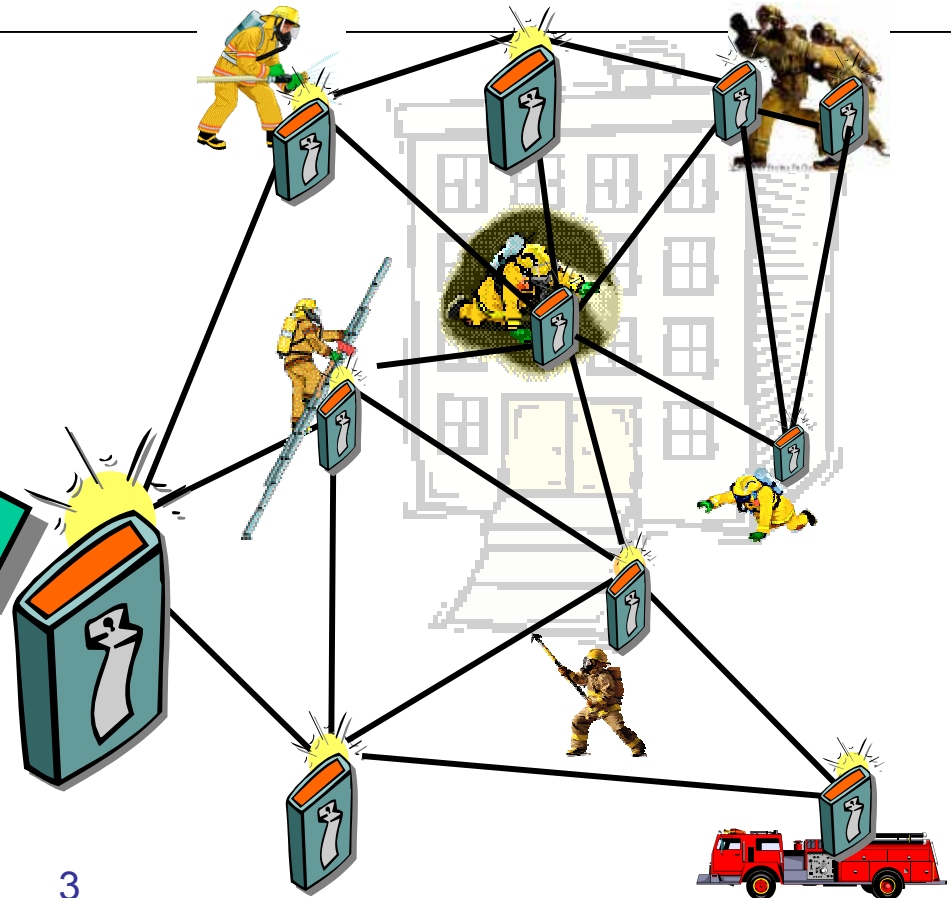


- Where are my friends at the mall?
- Where is my wallet?



# Technology Developed for Personnel Location

- A network of locators determine their location relative to each other and transmit their location to a command center
  - Can penetrate building materials, commons obstructions, fire and smoke



# Market Strategy: New Services from LPS

## • Mobile Phones & Consumer Electronics

- Extend GPS reach to find things indoors
- Sell to cell phone manufacturers through carriers
- Partner with Mobile System Carriers for new services enabled by LPS

### **\$7B Market Potential**

63% of cell phones have GPS so LPS extends utility of location indoors (1 Billion cell phones/yr.)

New service: Finding people & things you care about

## • High Value Asset Tracking

- Sell to high value asset manufacturers
- Improve logistics efficiency, lower product loss & improve transport security

### **\$1B Market Potential**

Mfgs. Install tag in product for inventory & process control

Cost savings pays for tags

# Market Strategy: Develop Synergies for Future

- New “Google” for Mobile System Carriers
  - Build partnership with MSCs and Retail
  - Asset Mfgs. Pay MSCs and Retail for POS display traffic data and for upsell to related products & brands
- 1 Billion mobile phones sold per year
- Finding things in virtual space (Internet) enabled new business model (Google and Yahoo)
- Finding things in real-space will also enable new revenue streams
- Operates indoors with 5cm accuracy vs. outdoors with 10m accuracy for GPS

## **\$10B Market Potential**

Customers search for asset & get location info. from service provider

“Google” for real-space - new advertising revenue potential



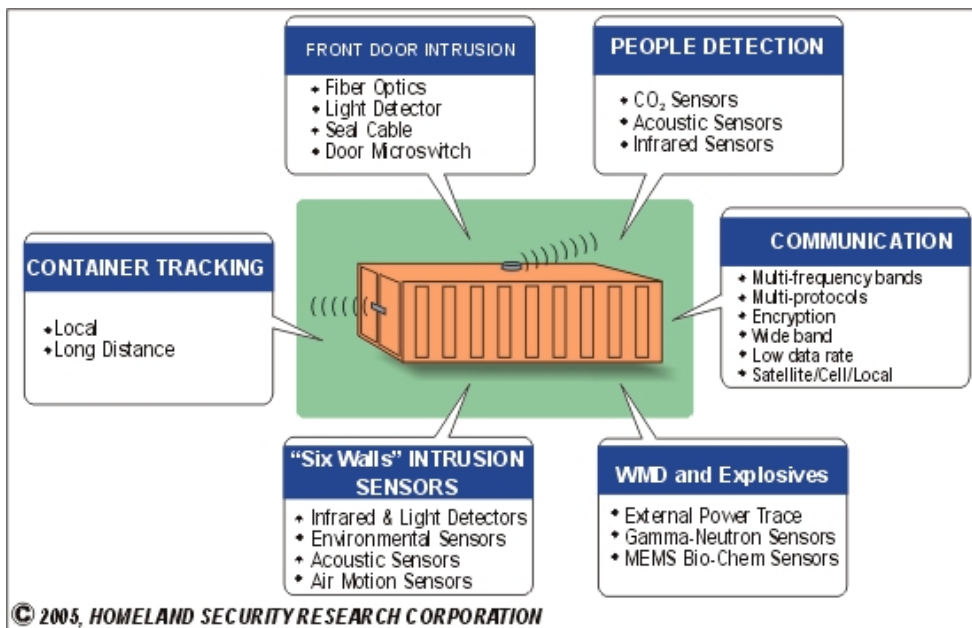
**Where is the flat screen display that's on sale today?**

**What other comparable brands are at this store?**

**Which brand will give me the best promotion today at this store?**

# Locate High Value Assets for Low Cost

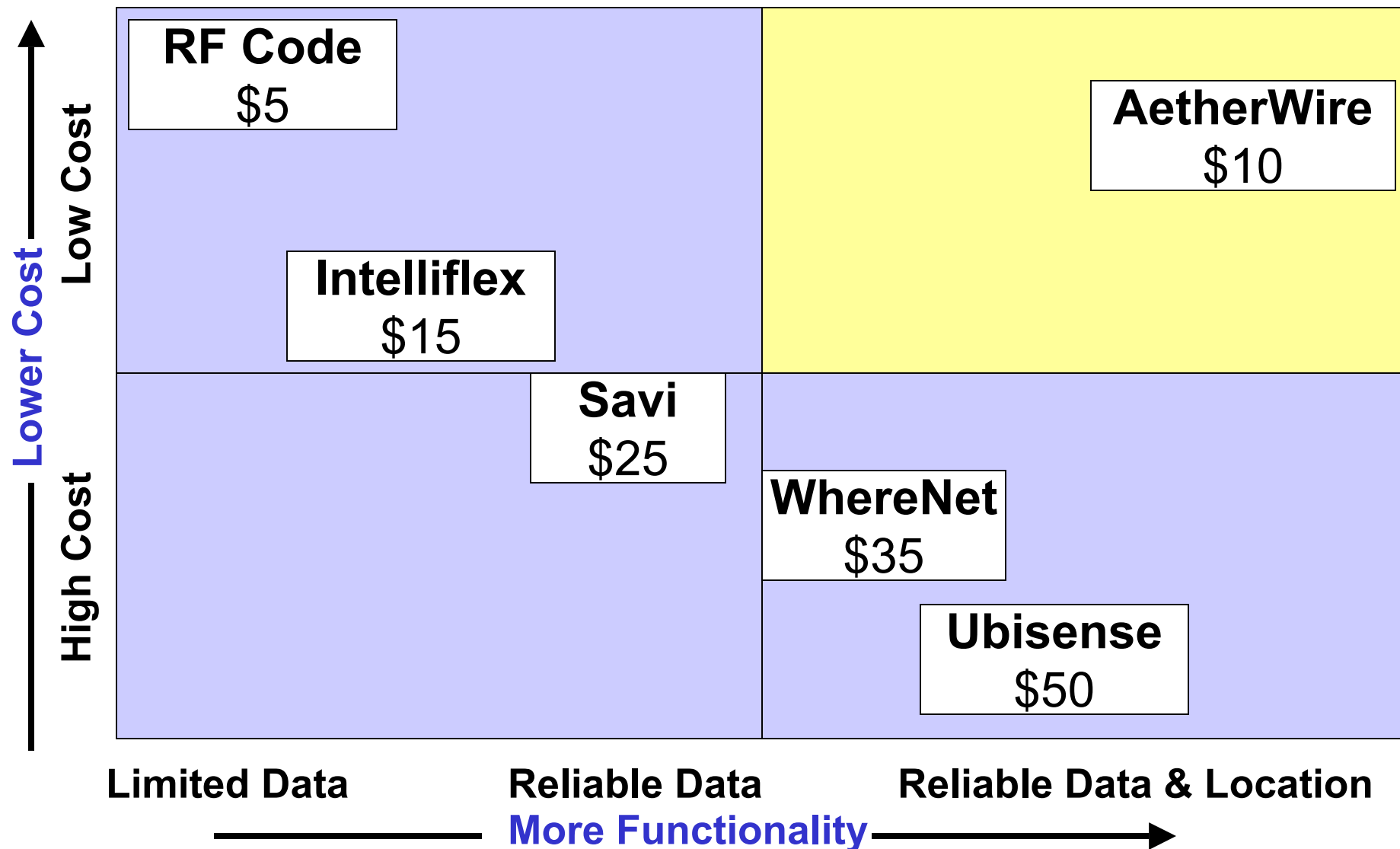
**Hundreds of Millions of devices at ten dollars each**



**Early Market Gives Fast Volume Ramp to Drive Down Costs**

- High Value Assets - Anything that will ruin your day if you lose it
- Active RFID represents almost half of the total dollar volume of the RFID market
- Current Active Tags (no location) \$20 to \$100 each
- Lower deployment costs will increase market size

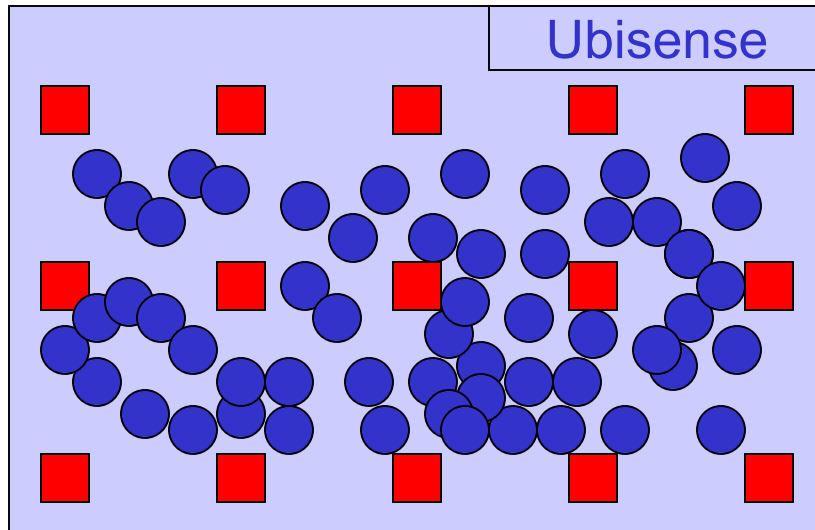
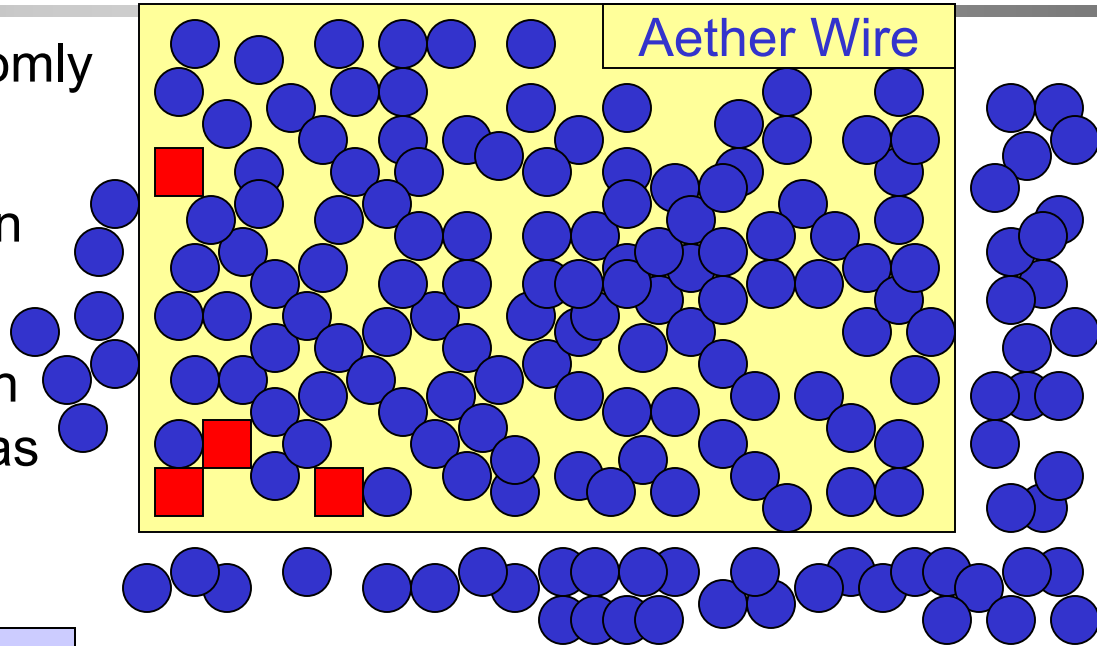
# Location Features at Active RFID Costs





# Lower Deployment Cost with Aether Wire

- **Aether Wire** needs four randomly fixed points to give 3D location
- Tags (peers) are single silicon SoC, so price can be sub-\$5
- Ad-hoc Mesh architecture can locate tags anywhere as long as within range of other tags



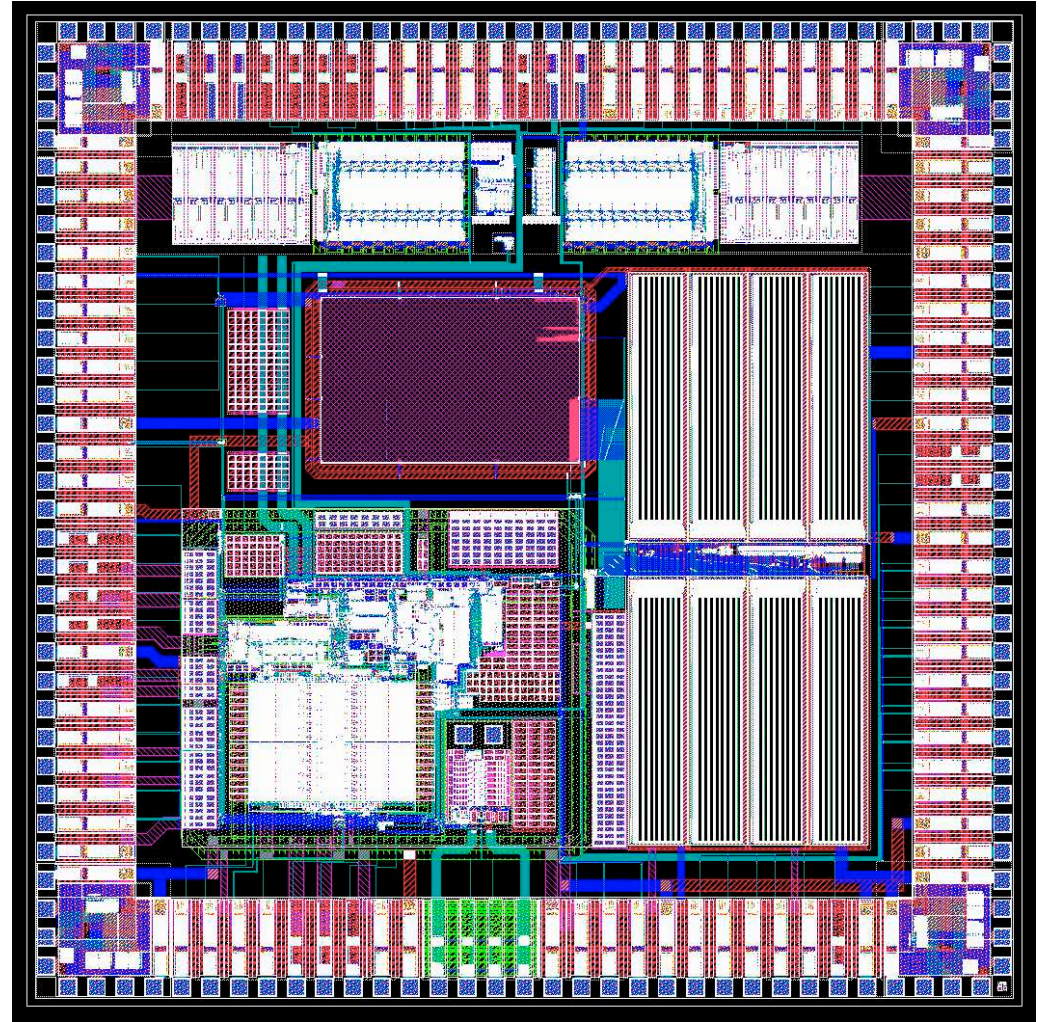
- **Ubisense** needs Reader every 30m with precise location for 2D location; \$10,000 each = \$180,000
- Tags (Pingers) are discrete, cannot scale to single chip; \$50 each
- Fixed reader controlled architecture can only locate devices inside the network



# Single Chip: Next Tape-Out

## Use of Funds: Transition to Production Single Chip

- **Aether10** - First single chip radio for 4/07 tape-out (100 die)
- **Aether11** - Pre-production single-chip radio for 9/07 tape-out (10,000 die)
- **Aether12** - Full production single-chip radio for 3/08 tape-out (1 million die)



Receiver, Driver, ARM Processor & Memory SoC chip  
(Aether10)

# Location Networks

