

Trends of Home Network System

Ihngun Nam

Director / KOCOM

KOCOM

Agenda

1. Concept of Home Network System from Korea

- Back ground of Home Network
- Concept of Digital Home
- Home Network Configuration
- Home Network Technologies
- Reason of Delayed Popularization

2. KOCOM H/N Solutions & Products

- Kocom
- View point in present Home appliances
- Kocom Brief Proposal
- System Configuration
- Products Features

3. New business areas derived from Home Network System

Background of Home Network

Exploit new business area according to saturation of existing market

● Market Saturation

- ◆ Mobile Phone market
- ◆ Internet market
- ◆ Telephone market

● Change of Social Paradigm

- ◆ Aging society
- ◆ Increasing woman worker

● Shift of IT Trend

- ◆ Converging Technologies
- ◆ Advanced Infrastructure
- ◆ Ubiquitous Acceleration

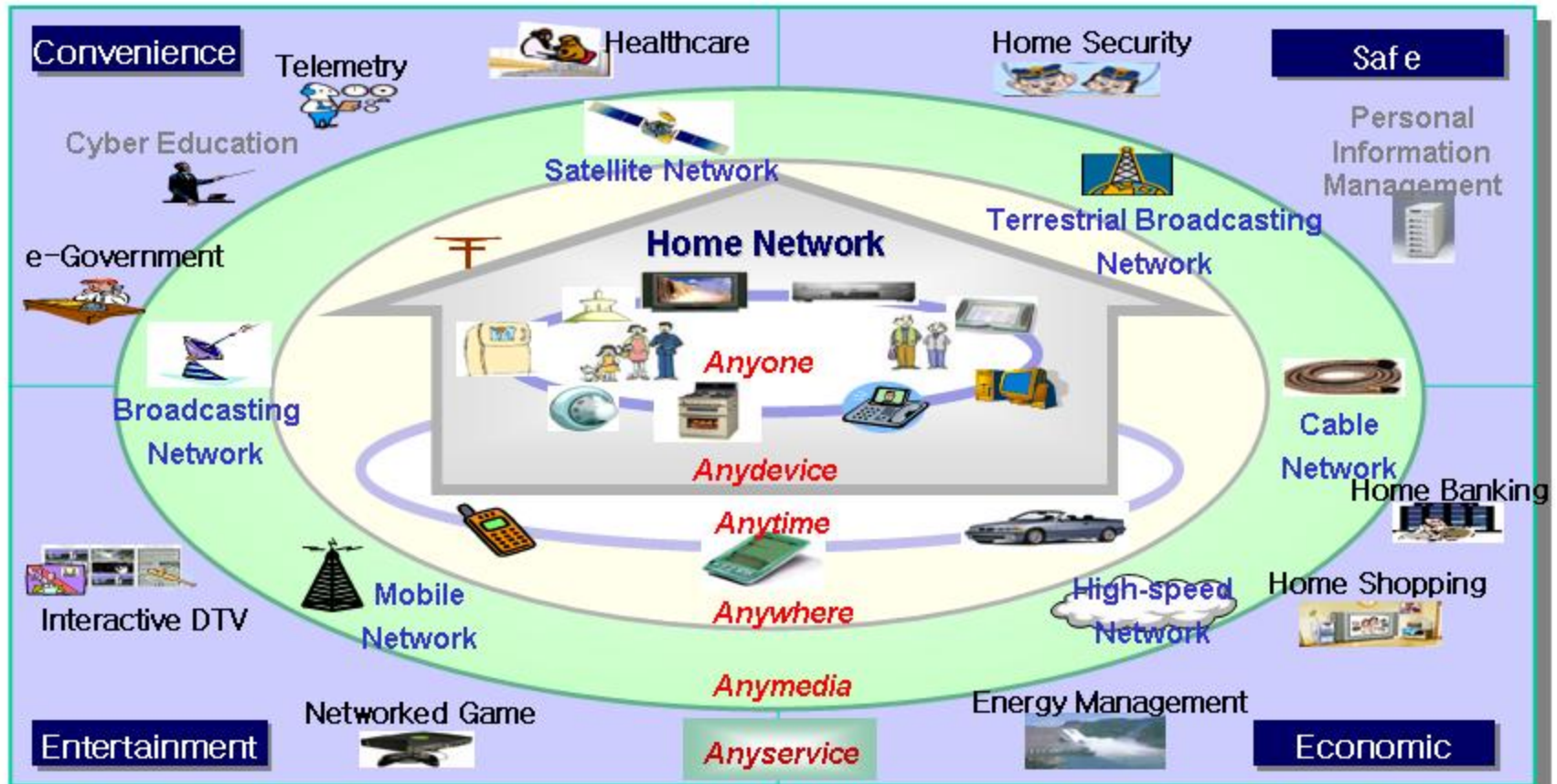


Home network will be
new driving force for
growth engine

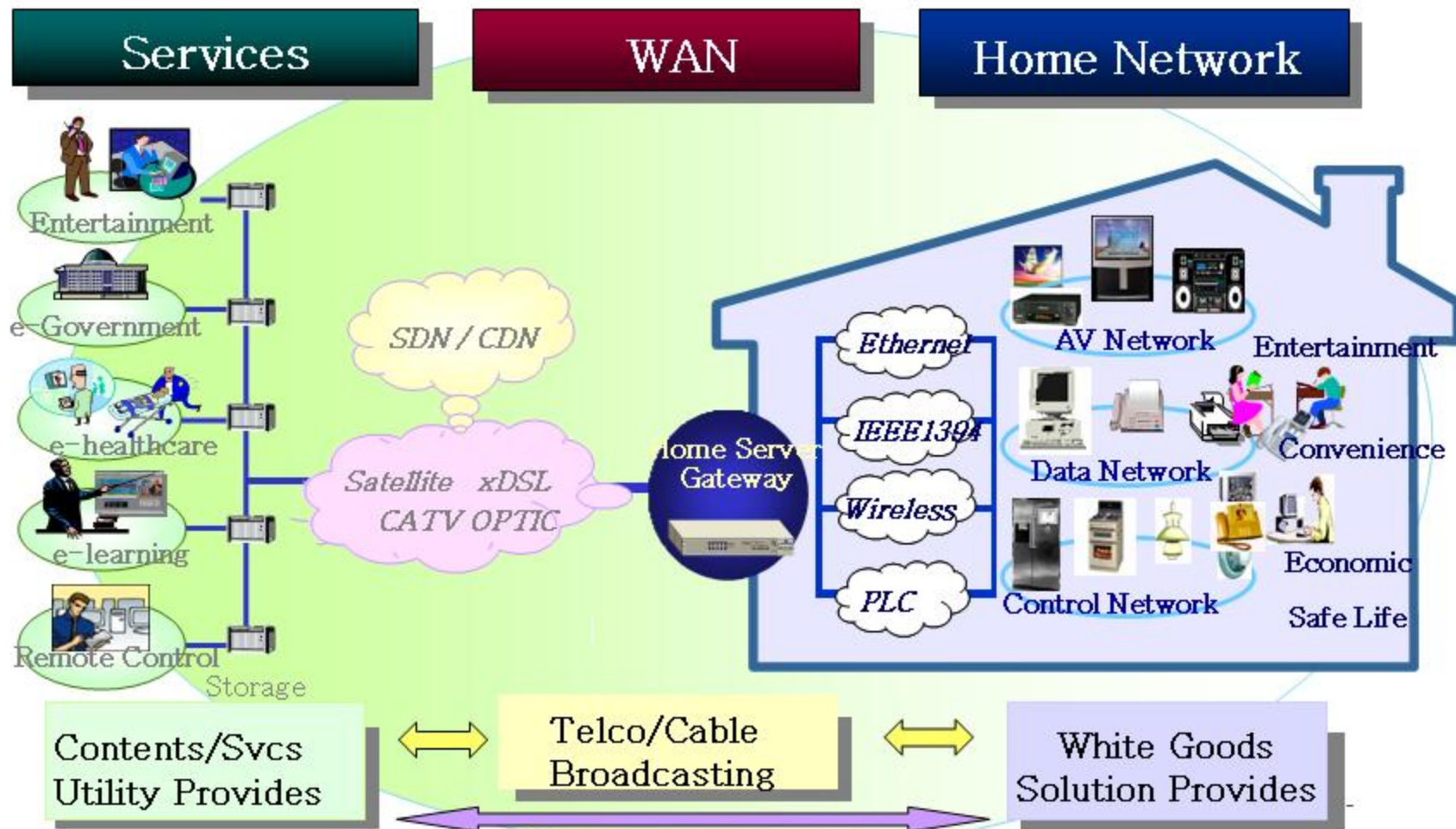
Concept of Digital Home

Home Gateway•Server, Home Networking, Smart Home Appliance,
Ubiquitous Computing

Neo-industry producing various services, by using various ITs

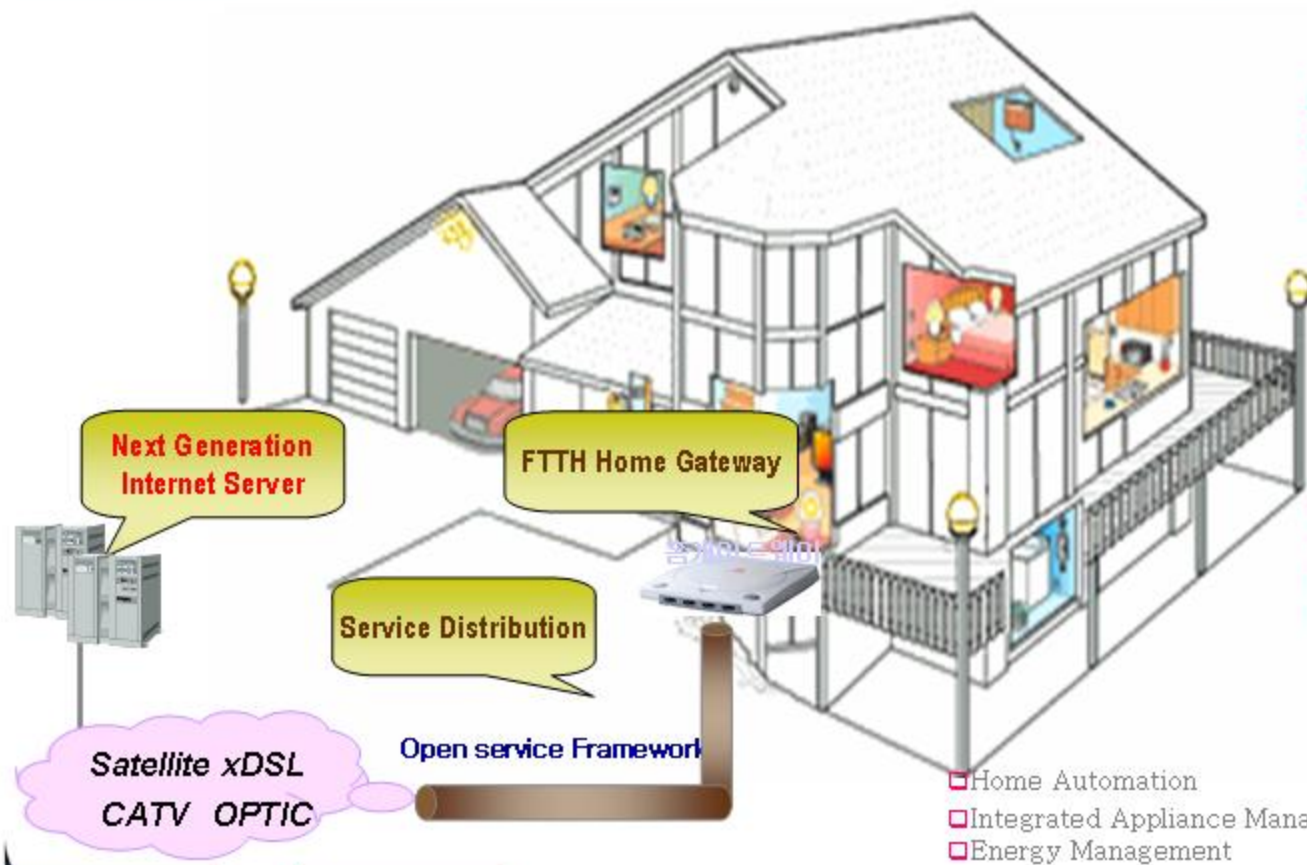


Home Network Configuration



Technologies related to Home Network

Commercialization of the home network product



Entertainment service



- High Quality Multimedia Service
- PVR, On-demand Game, VOD, EoD
- Communication/Broadcast Converged Service

Information Service



- Person/Family data Management
- Home Shopping, E-Commerce
- E-Healthcare
- Home Security

Communication Service



BcN

IPv6

KOCOM

Reason of Delayed Popularization

- Lack of local service & contents provider – local portal – near subscriber not infrastructure
- Lack of easy installation method on established building
- Digital divide
- CE & Home appliances supporting network are not yet spread.
- Conservative each business parties
- Lack of efforts to make business models prior to system development

KOCOM H/N Solutions & Products

KOCOM

- Has been engaged itself in the field of manufacturing and installation business of Home Automation for 30 years.
- A leading company in manufacturing H/N devices, system design & consulting Home Network.
- A leading company on surveillance camera system in the world
- R&D center focusing not only on engineering but also on the knowledge field to increase our quality of life.

View point in present Home Appliances

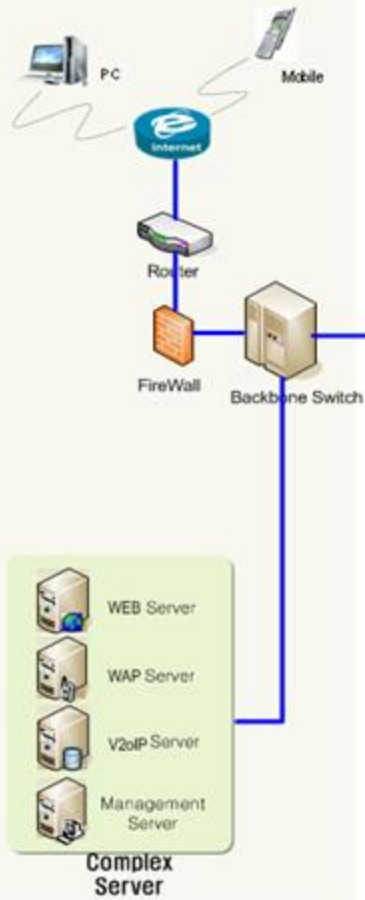
- Anyone** : Many people are poor at using newly developed IT devices and Cellular phone)
- Digital Divide
- Any-device** : PC → inconvenience to use
Cellular → Difficulty in operation on web base, and small sized screen
Digital TV → Power Consumption in waiting
Dull booting time
- Connectivity** : Most consumer electronics have MCU in their controller, but the MCU is being operated independently at the moment.
- RF Device** : There are some network problems like sudden system shut-down in case that there are too many RF units being operated at a time, because each RF unit has its own frequency.

KOCOM Brief Proposal

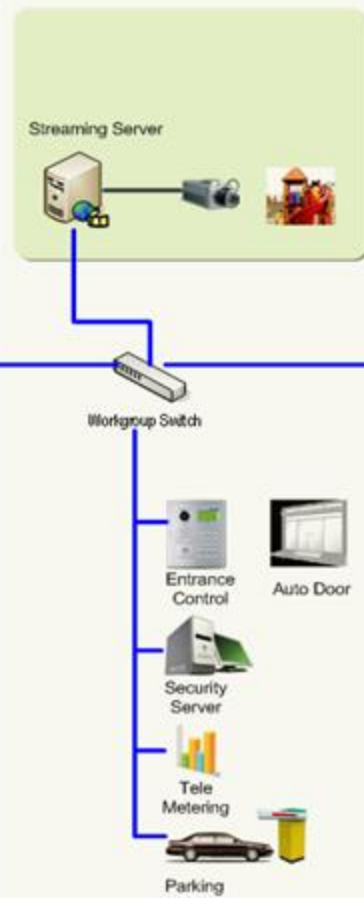
- Web/Wall Pad based on Embedded system with user friendly graphic icon.
- Edit function to rearrange the contents icons on the panel at user's convenience.
- Home appliances are checked and controlled remotely by using PC/Cellular from outside
- It's better that there are small scattered portal service providers taking charge in each area, rather than the huge portal service through mainframe.
- Communication with the each home appliances by RS-485 serial.
- Increased convenience in installation and use by Wi-Fi, zigbee(802.15.4) and IrDA etc.
- In case that disasters are occurred at home, the service providers in each area manage them as well as network checking the status of each device through NMP MIB II each device real-time
- Basic hardware diagnosis such as electric or water leakages and status diagnosis of home appliances, in case of disorder the error sign is alerted to the maintenance agent and proper action is taken.

KOCOM H/N Solutions & Products

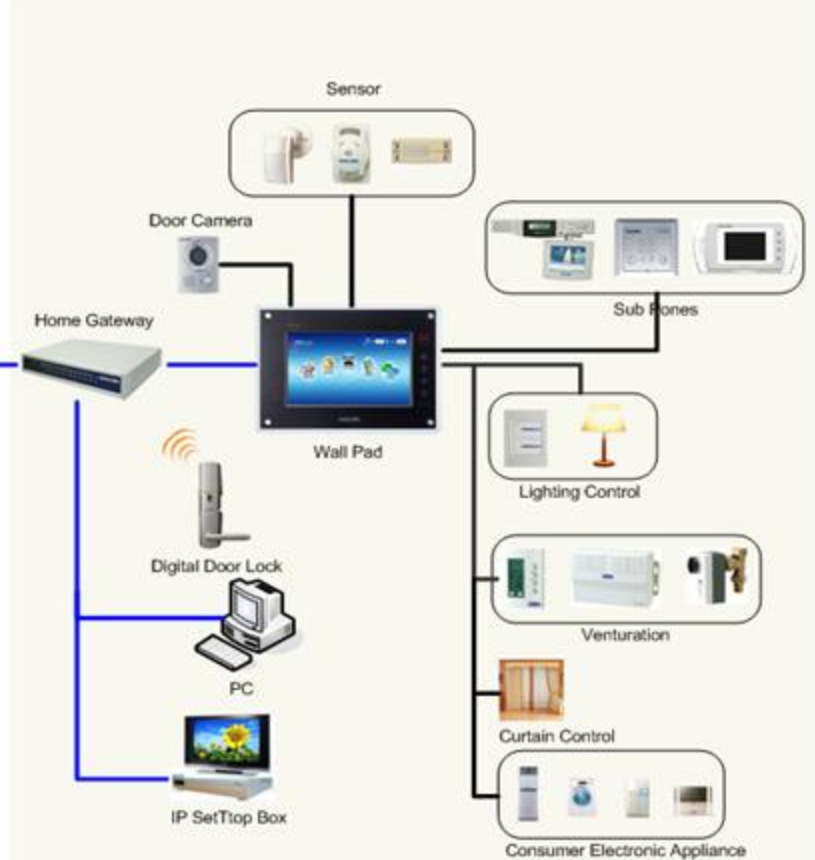
Complex Network



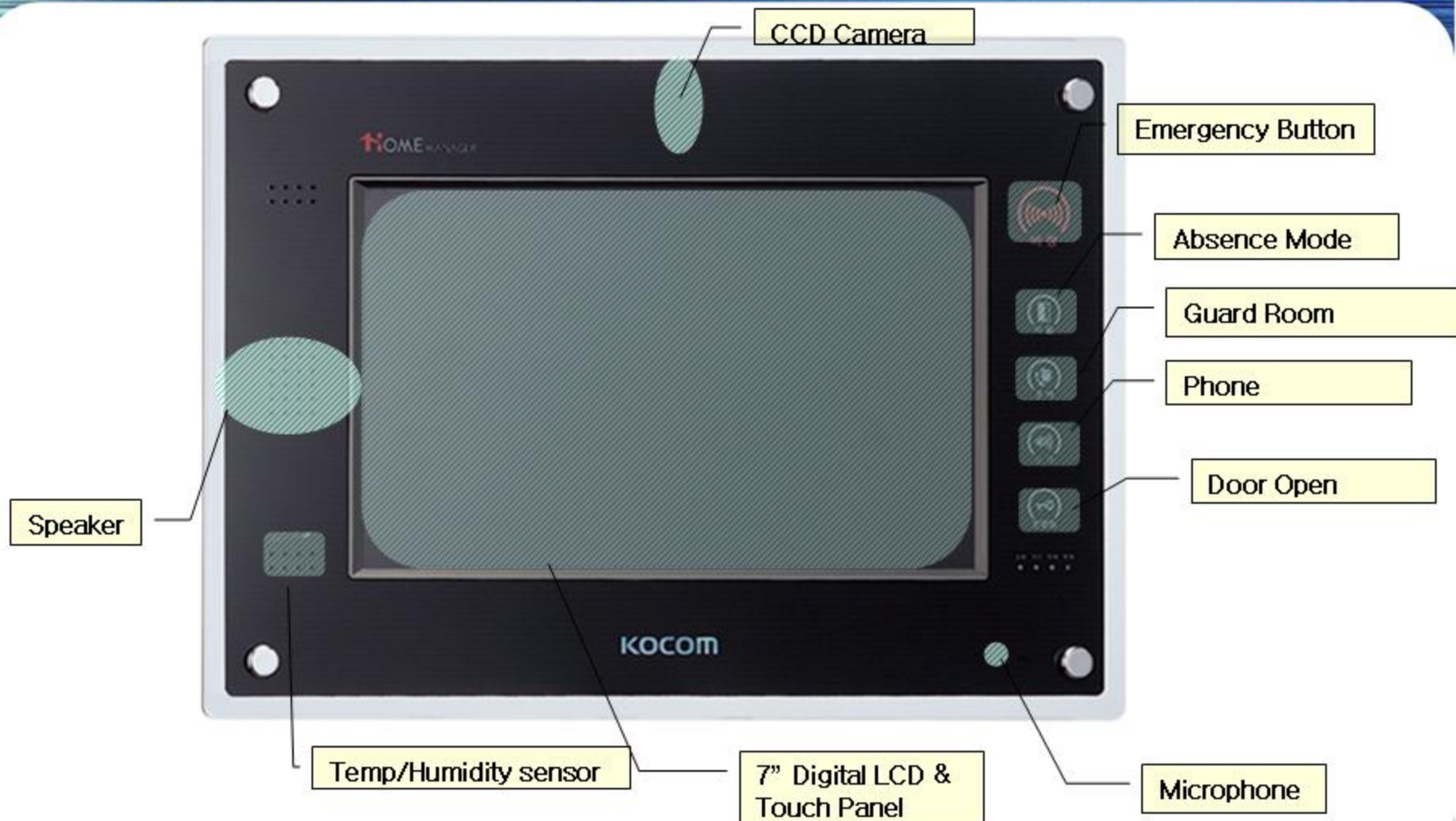
Multi User Facility



HOME

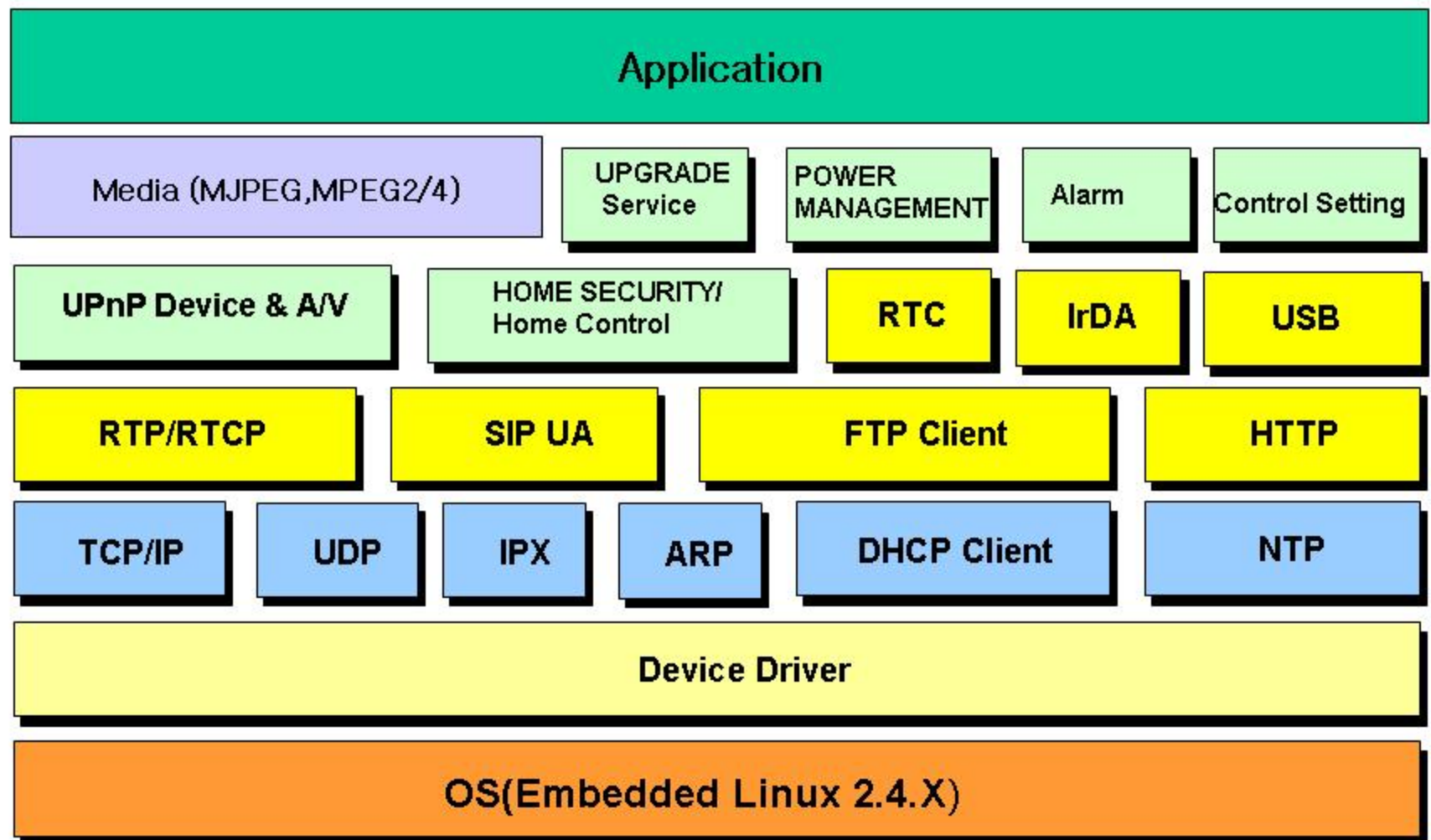


KOCOM H/N Solutions & Products



KOCOM

KOCOM H/N Solutions & Products



KOCOM H/N Solutions & Products

Monitor Main Image



KOCOM H/N Solutions & Products

Disasters Status Image

The screenshot displays a home management interface with a top navigation bar containing icons for Security, Com., Control, Life Info., and Set. On the right side of the top bar are circular buttons for INFO. and HOME. Below the navigation bar, a 'Security' tab is highlighted in orange, and floor selection buttons for 1F, 2F, and 3F are visible. The main area shows a floor plan of the 1st floor with several rooms: Library, Kitchen, Second Room, Living Room, Bath Room, Guest Room, Dress Room, and Main Room. A 'GAS' alarm icon is located in the Kitchen area, and a fire alarm icon is in the Living Room. Two green icons representing a person running are placed in the Bath Room and Guest Room. On the left side, there are three circular buttons: 'Walking' and 'Stop' (both with speaker icons), and 'Test' (with a key icon). At the bottom left, the text 'HOME MANAGER 2.1' is visible, and at the bottom right, there is a 'Save' button with a hand cursor icon.

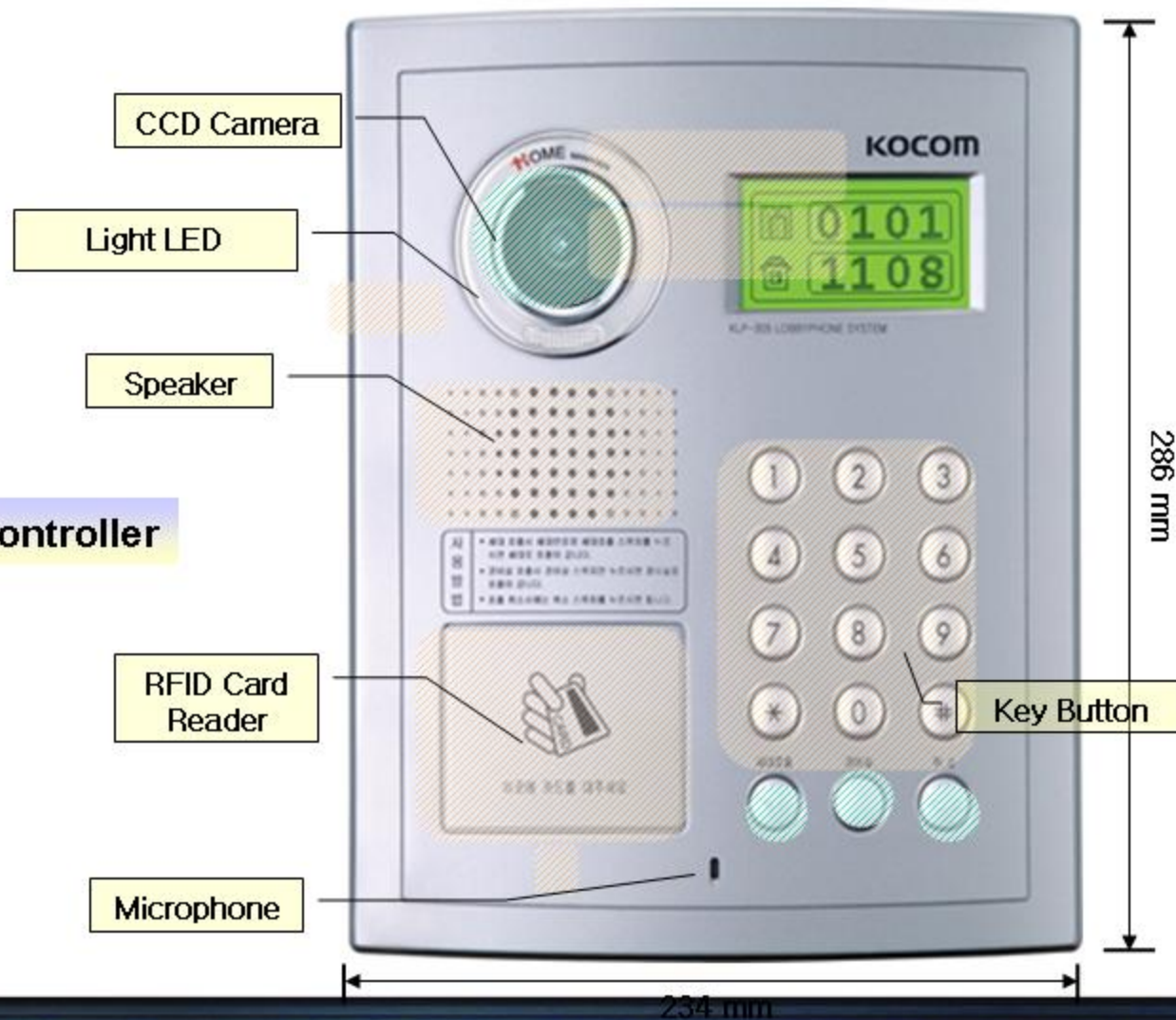
KOCOM H/N Solutions & Products

Lightening Control Image

The interface features a top navigation bar with icons for Security, Com., Control, Life Info., Addition, and Setting. On the right, there are buttons for INFO. and HOME. Below the navigation bar, a floor selection bar shows 1F (selected), 2F, and 3F. The main area is divided into a control panel on the left and a floor plan on the right. The control panel lists rooms with corresponding light icons: Living Room (4), Main Room (3), Library Room (4), Second Room (2), and Bath Room (2). The floor plan shows a layout with rooms: Library, Kitchen, Second Room, Living Room, Dress Room, Main Room, Bath Room, Guest Room, and Entrance. Each room contains a light icon, indicating its status.

KOCOM H/N Solutions & Products

Entrance Access Controller



KOCOM

New business anticipation in Home Network System

1. Branch portal service agent nearby subscriber's each location.
 - Local information about local facilities and amenities
 - Goods/Service order & delivery System
2. Safeguard business against household disasters
3. Household hardware maintenance business
4. Alert agency to vender for CE & appliances faults maintenances
5. Advertising agency for local mart/business to each subscriber
6. Local VOD service business

New business areas derived from Home Network System

7. Matchmaking business (party, tour, event, funding, consulting, etc)
8. Local contents provider
9. Local build/maintenance business regarding computerized system

Q & A

Thank You !!

KOCOM