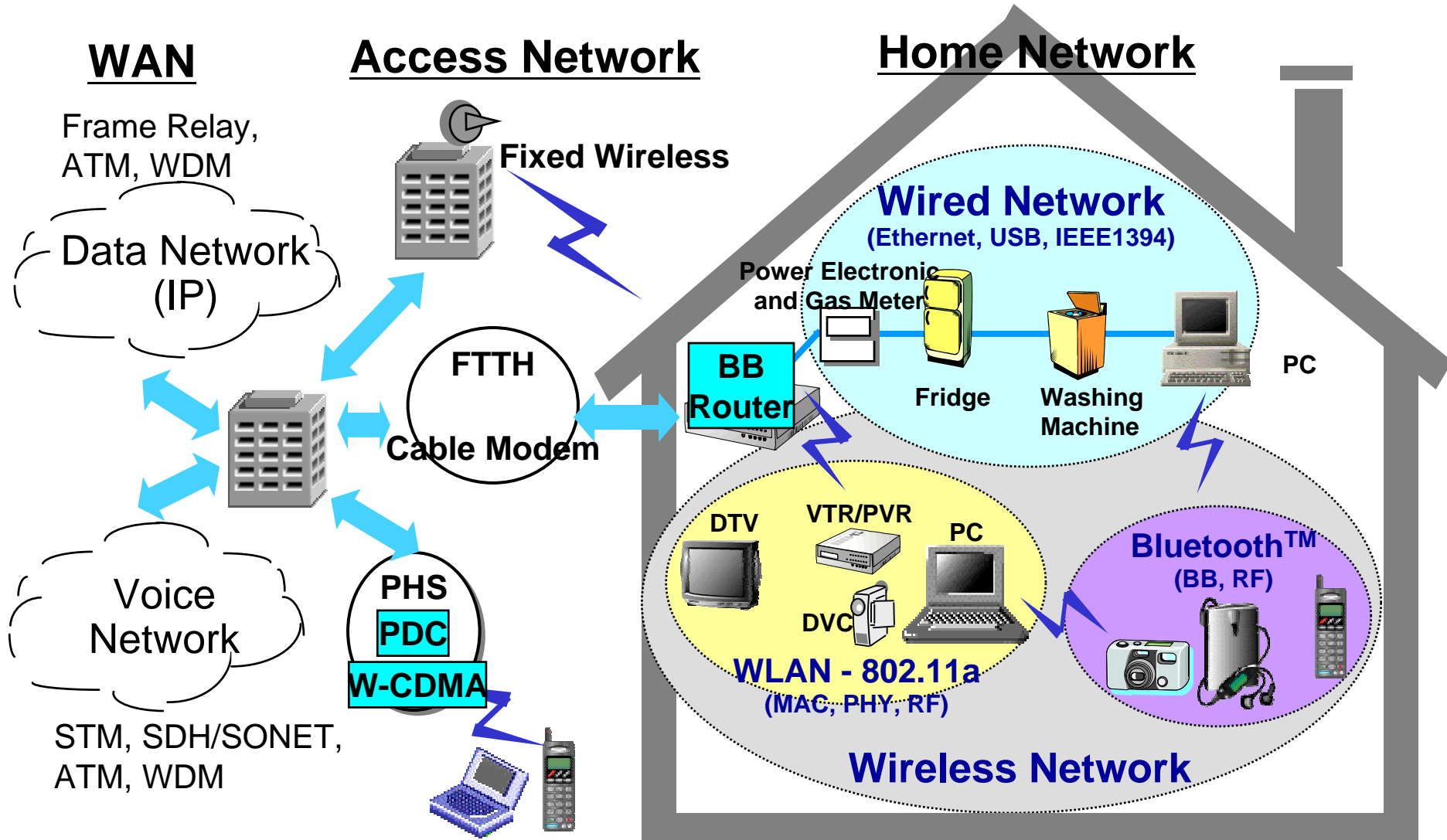


# BlueA™ Bluetooth™ Solution

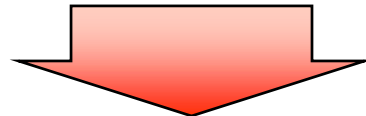
# Network Communication Products



# Digital Home Electronics Network

## ● Issue

- Build up network infrastructure (wired or wireless)
- Portability (mobile tools: DVC, DSC, digital audio, PC)



## “Wireless Network”

Bluetooth™

- Low Power

Wireless LAN (IEEE802.11a)

- High-Speed Wireless Data Transfer

### Typical applications



DVC, DSC, digital audio, etc.  
⇒ Mobile equipment

DTV, PVR/VTR, PC, etc.  
⇒ Multimedia equipment

**We provide Bluetooth embedded solutions for networking and communication applications**

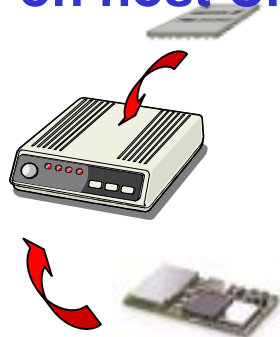


# Fujitsu Solutions for Customer Applications

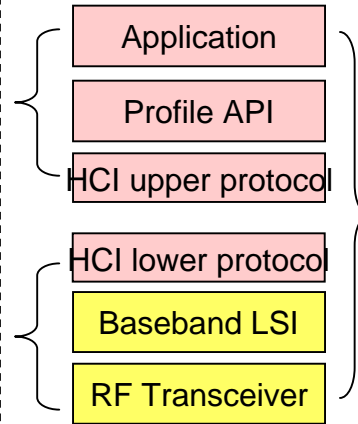
- Concentrate on embedded products with FAT model solution

## Competitor Solution

-High processing power on host CPUs



HCI module



## Fujitsu Solution

-Low processing power on host CPUs



Fujitsu module (FAT module)

### Target applications

- PCs & PC peripherals
- Mobile phones (at early market stage)
- Printers (at early market stage)

### Target applications

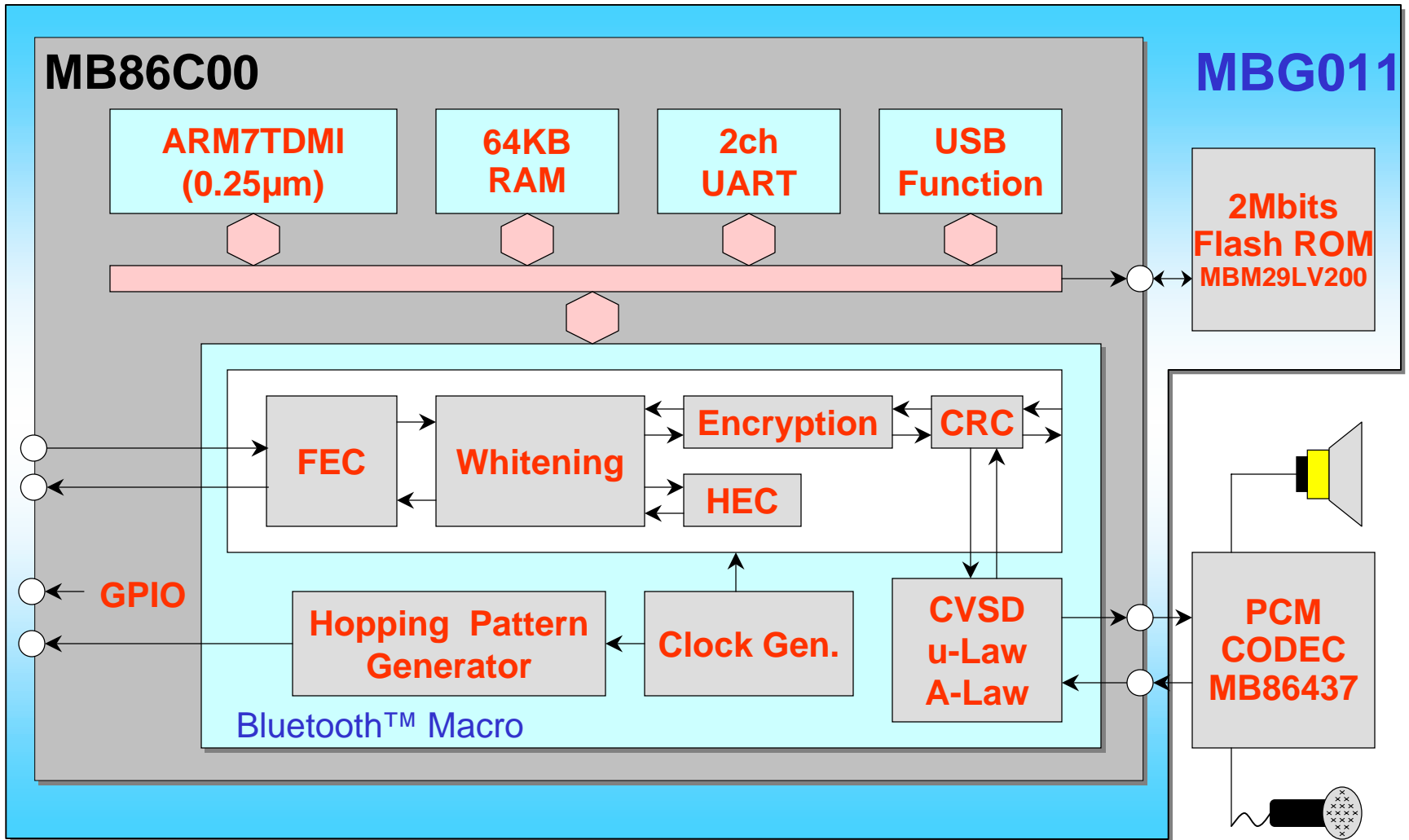
- Mobile phones (at MP stage)
- DSC / printers (at MP stage)
- Car audio
- Digital AV

# Bluetooth Baseband – MB86C00 / MBG011

## Products Outline

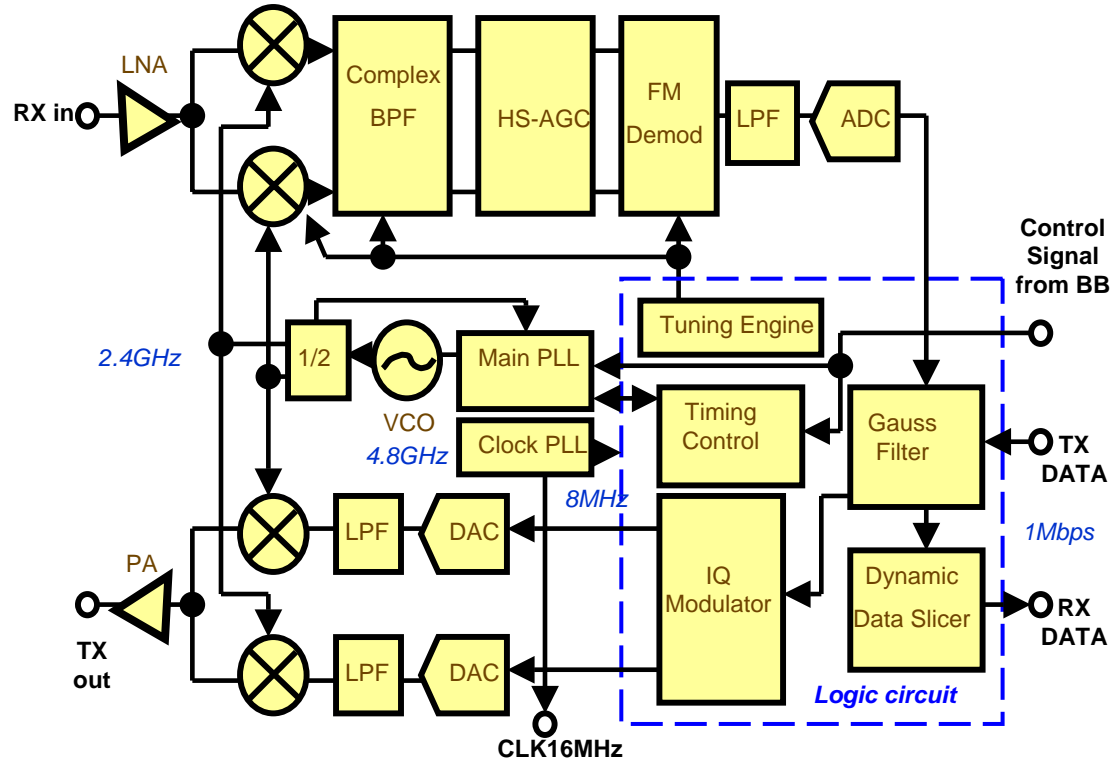
- **Baseband LSI: MB86C00/MBG011**
  - Stacked with 2Mbits Flash ROM (MBG011)
  - On-chip 64KB SRAM, 32KB ROM
  - UARTx2, USB
  - RF Interface for MB15H101A , SiW1502 and CX72303
- **Reference board**
- **Protocol stack software**
  - Lower protocol stack (LM, LC)
  - Upper protocol stack (L2CAP, SDP, RFCOMM)
  - Profile manager, profile API
- **Profile software**
  - Provide profile software for each application

# Bluetooth Baseband LSI MB86C00 / MBG011 Block Diagram



- **On-chip 64KB RAMs and 32KB Mask ROM**
- **Stacked 2-Mbits Flash ROM (MBG011)**
- **Small size FBGA176 (8mm x 8mm x 0.93mm)**
- **ARM7TDMI CPU core**
- **Bluetooth baseband core**
- **USB v1.1 function**
- **UART (eq. to 16550) x 2ch**
- **Peripheral bus interface**
- **RF interface for MB15H101A / SiW1502 / CX72303**
- **PCM & CVSD audio interface unit**





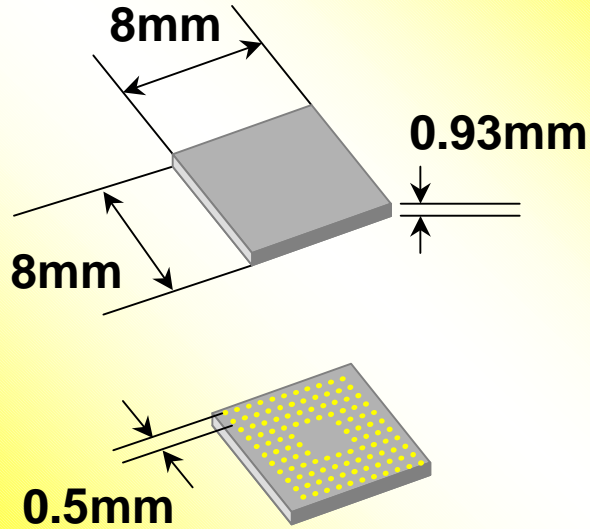
Small BCC 32



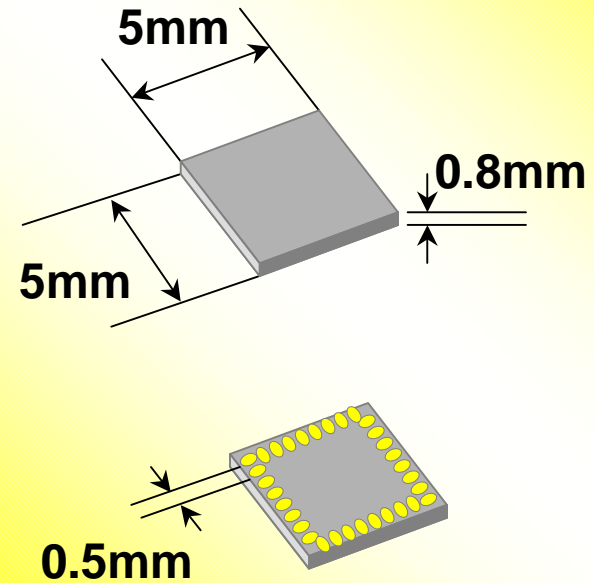
1. Fully integrated VCO (on-chip varactor & inductor)
2. Built-in fauss filter, channel filter
3. Low power

# Bluetooth Baseband LSI / RF LSI Package

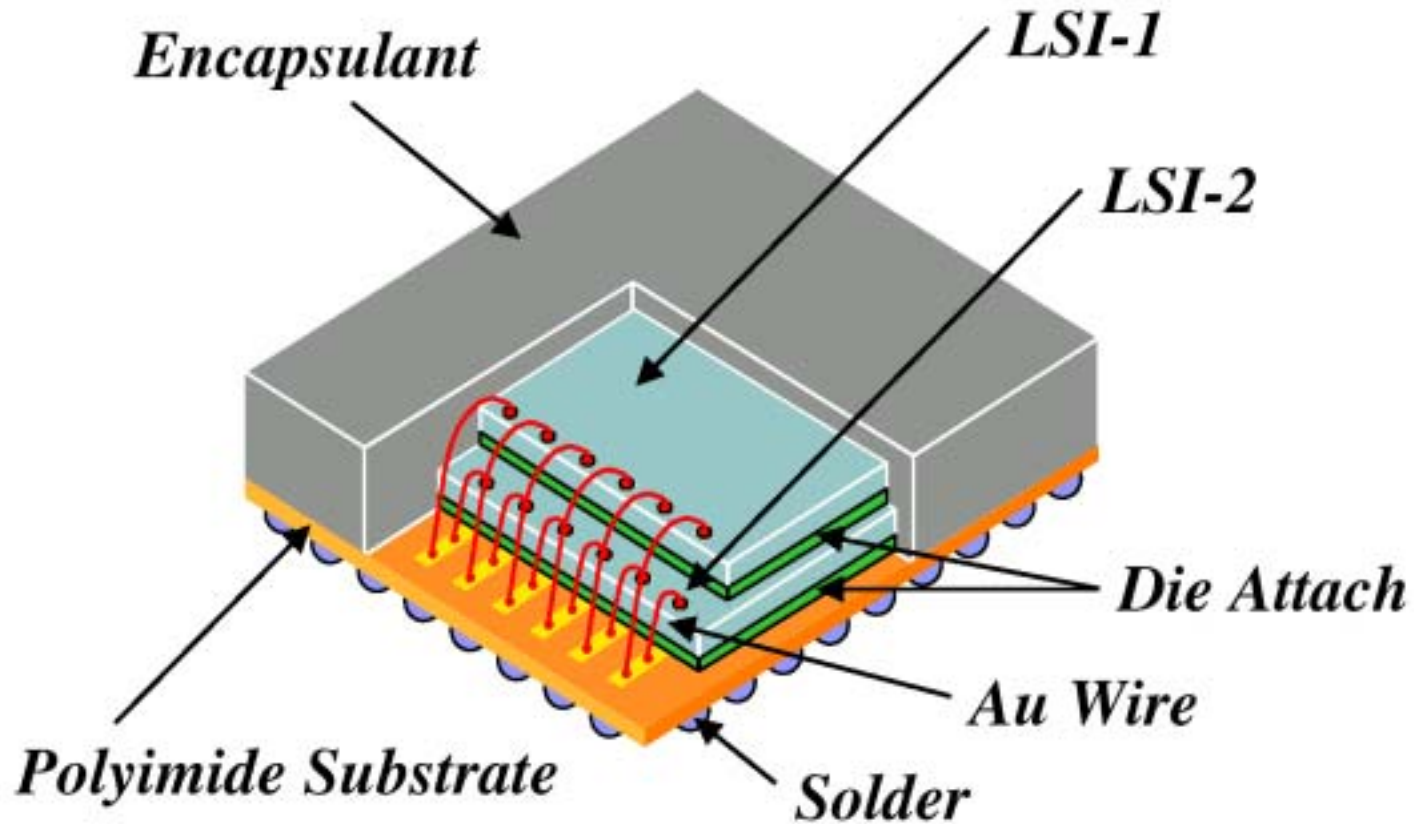
## MB86C00 / MBG011 Package [ 176pin FBGA ]



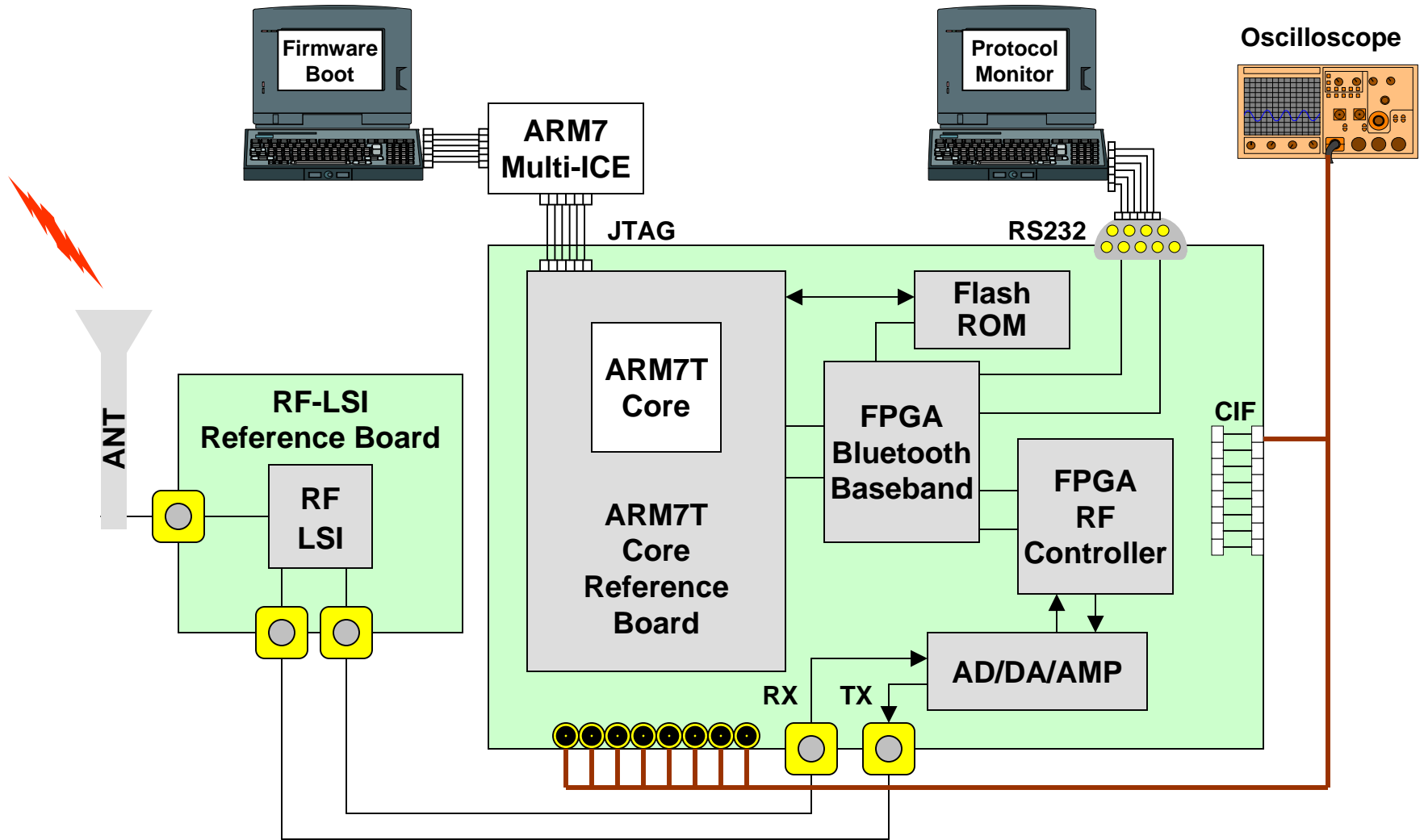
## BiCMOS RF LSI Package [ 32pin Bump Chip Carrier ]

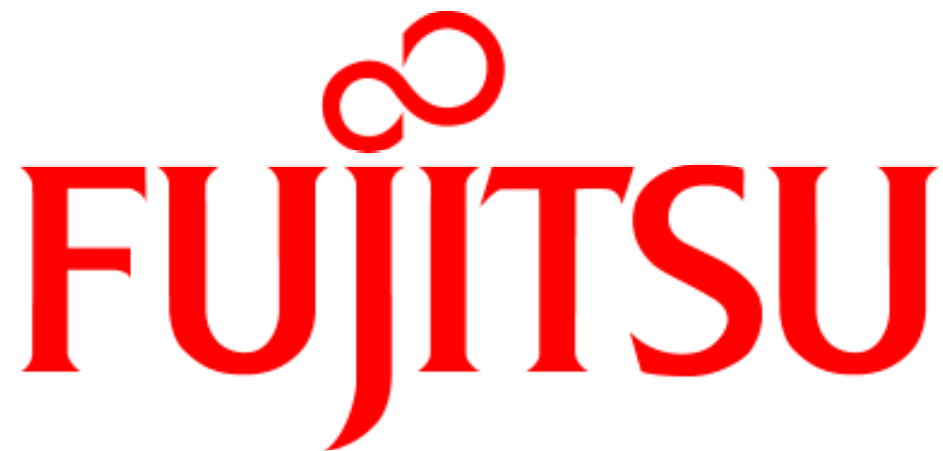


# Bluetooth Baseband LSI Package



# Evaluation Board





**FUJITSU**

**THE POSSIBILITIES ARE INFINITE**