

SoC Technology Center

March 2007



STC Mission

To deliver chip-level solutions for mobile broadband, applications, and convergence services

- Mobile broadband : MIMO Mobile WiMAX**
- Convergence : voice/data/video/multimedia, multi-play on IP networking, Web 2.0 applications**
- Hand-held device IC : RF, analog, digital, DSP**



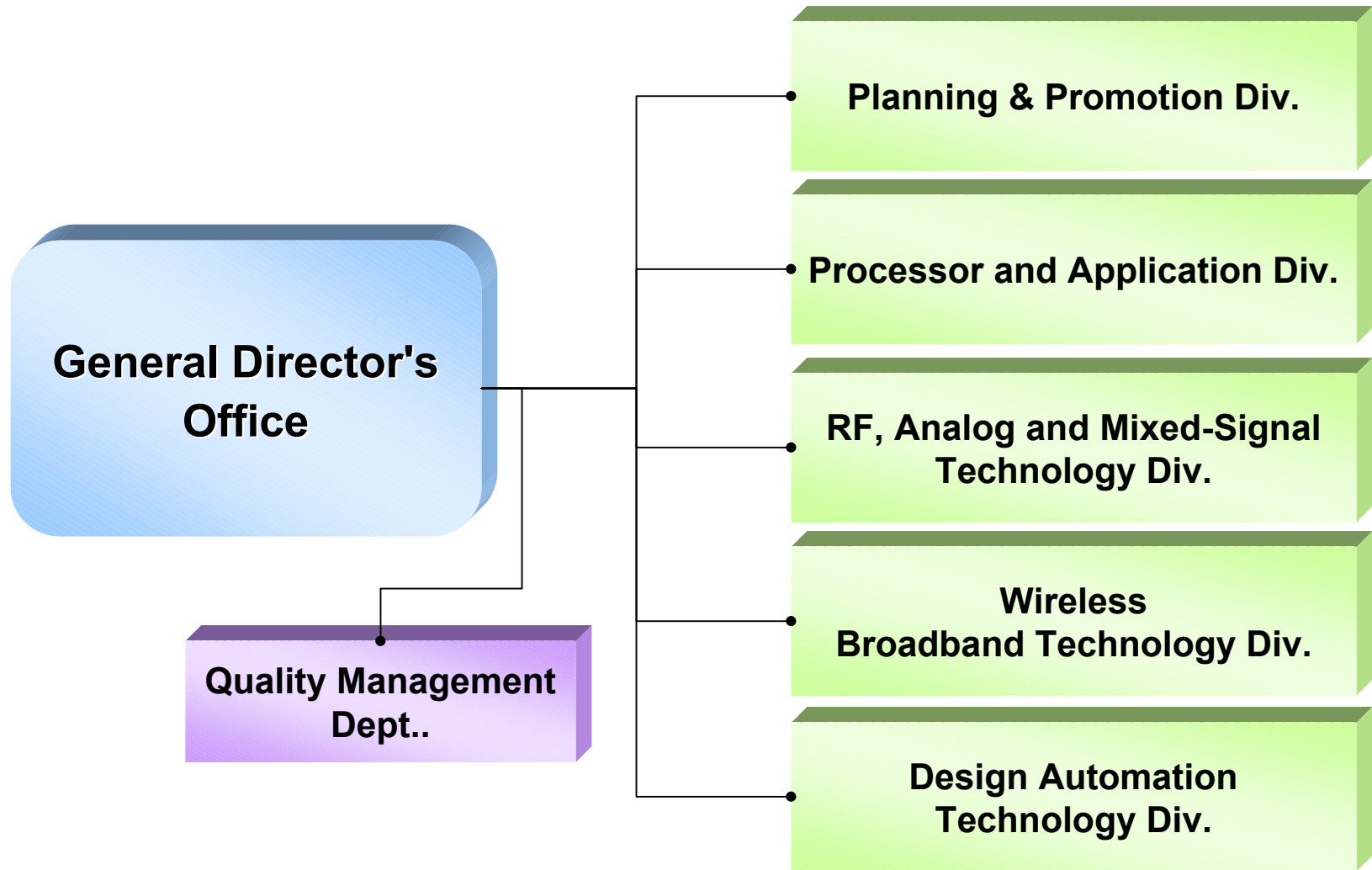


Mission and Position

- ✓ **Vision:** To establish a world-class SoC R&D center
- ✓ **Mission:** To devote efforts in R&D of advanced innovative technologies and create values for industrial growth.
- ✓ **Position:** To be the technology inventor and top-of-choice partner in Taiwan's SoC industry.
- ✓ **Critical Success Factors:**
 - ✓ Talent people
 - ✓ Business Development ability
 - ✓ IP and Technology
- ✓ **Core Process:** Need - Solution - Differentiation - Benefit



STC Orginzation





Core Business

- **Technology R&D**
 - mainly from MOEA, NSoC Program
- **Technology Transfer**
- **Technical Service**
- **New Business**
- **Incubation Service in Taipei Nan-Kang Park**
- **International Cooperation**

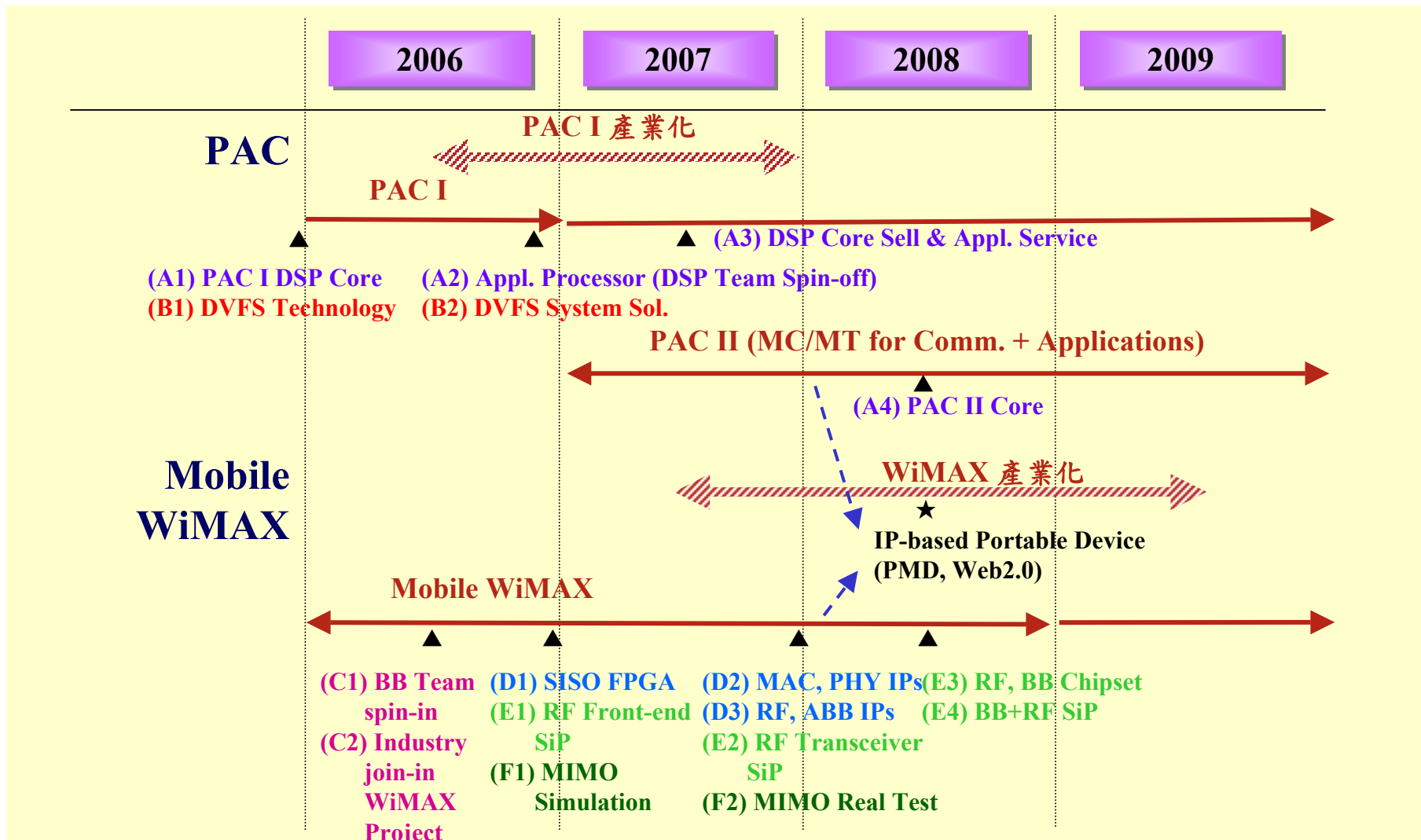


STC Main R&D Projects

- RF/AMS+Baseband \Rightarrow MIMO Mobile WiMAX SoC
 - RF design/test
 - Analog Mixed Signal Circuits
 - Communication baseband
 - System Prototyping
 - Advanced CMOS process
- PAC DSP Core \Rightarrow Application Processor SoC
 - SoC Architecture
 - Platform Programming
 - Embedded Software
 - Multimedia Applications
 - Low-power Technologies
- Cooperative developments
 - Hearing Aids, RFID



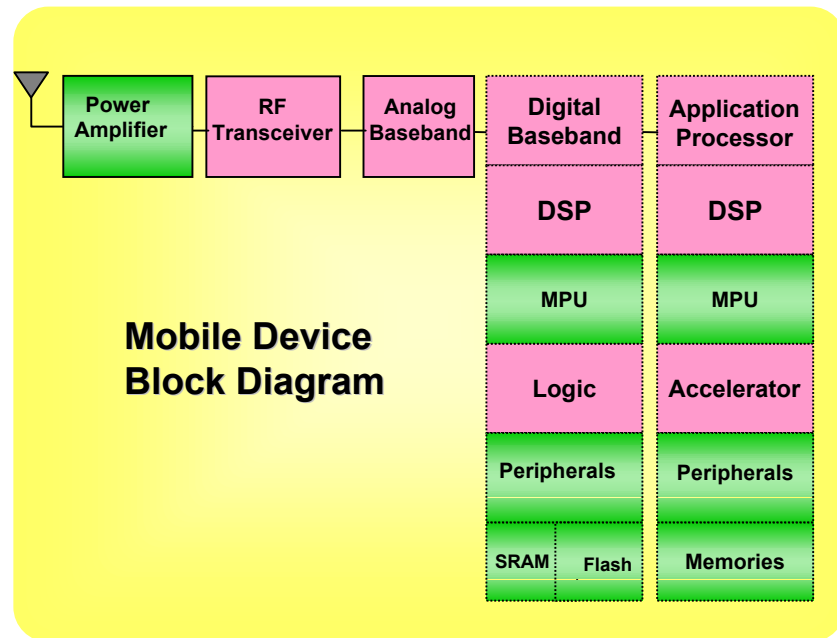
STC Technology Roadmap



STC R&D Focus

- **Personal Media Device (PMD) Architecture = WiMAX + PAC II**

DSP HW/SW Technology



Wireless Communication Technology

