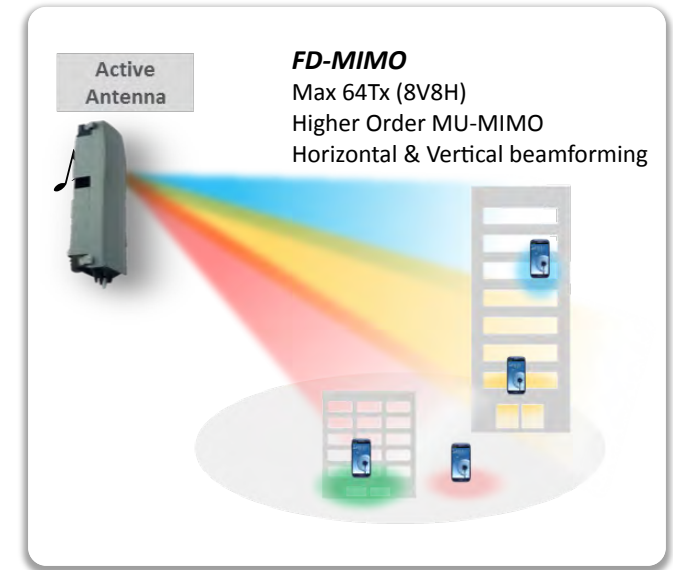
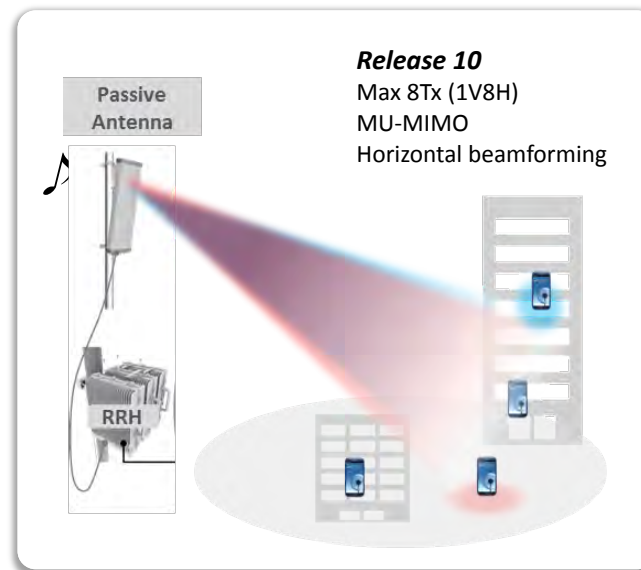
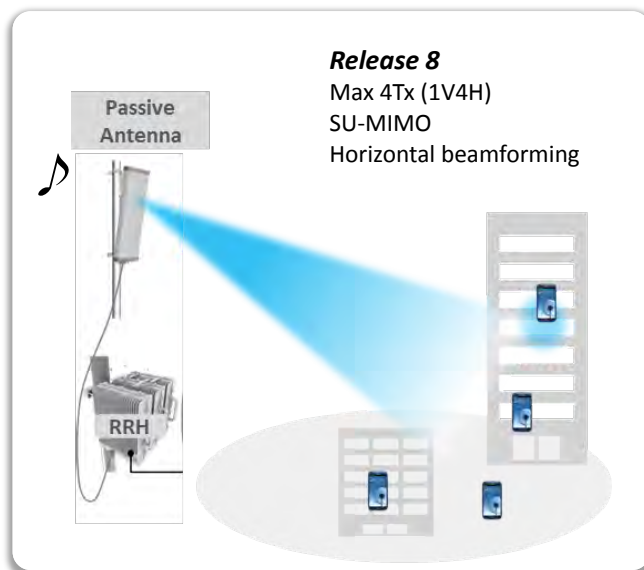


■ Full-Dimension MIMO with Massive Antenna Technologies

- Adaptive Vertical & Horizontal Beamforming with 2D Antenna Array
- Higher-order MU-MIMO with 3D-Beamforming towards Multiple UEs



Recent R&D Results - Full-Dimension MIMO

SAMSUNG

■ System Performance of FD-MIMO (Simulation Results):

■ 2~3-Fold Average System Throughput Enhancement

Simulation Configuration

□ 2-Tier Wrap-Around Model

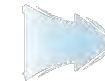
- 19 cell / 2-tier wrap around (3 sector / cell)
- 3D UMi, 200m ISD

□ 2D Antenna Panel Form-Factor

- Antenna spacing : 0.8λ in vertical / 0.5λ in horizontal



• 2D Beamforming
• Max 4 MU-MIMO



• 3D Beamforming
• Max 8 MU-MIMO

