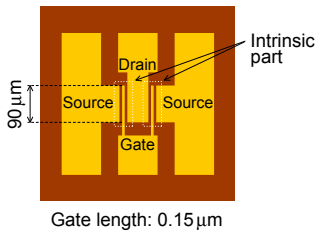
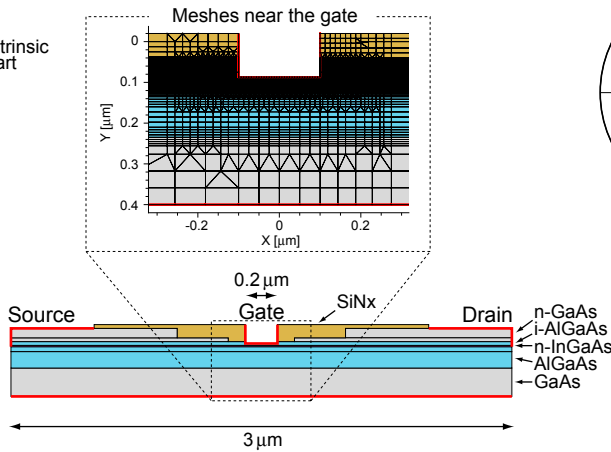


DEVICE SIMULATION OF HFET

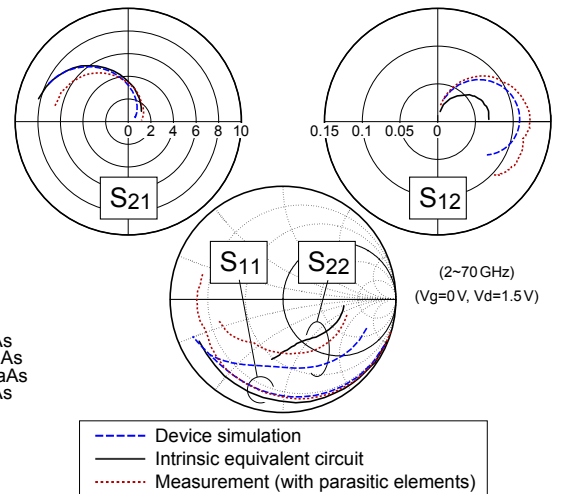
• HFET electrodes



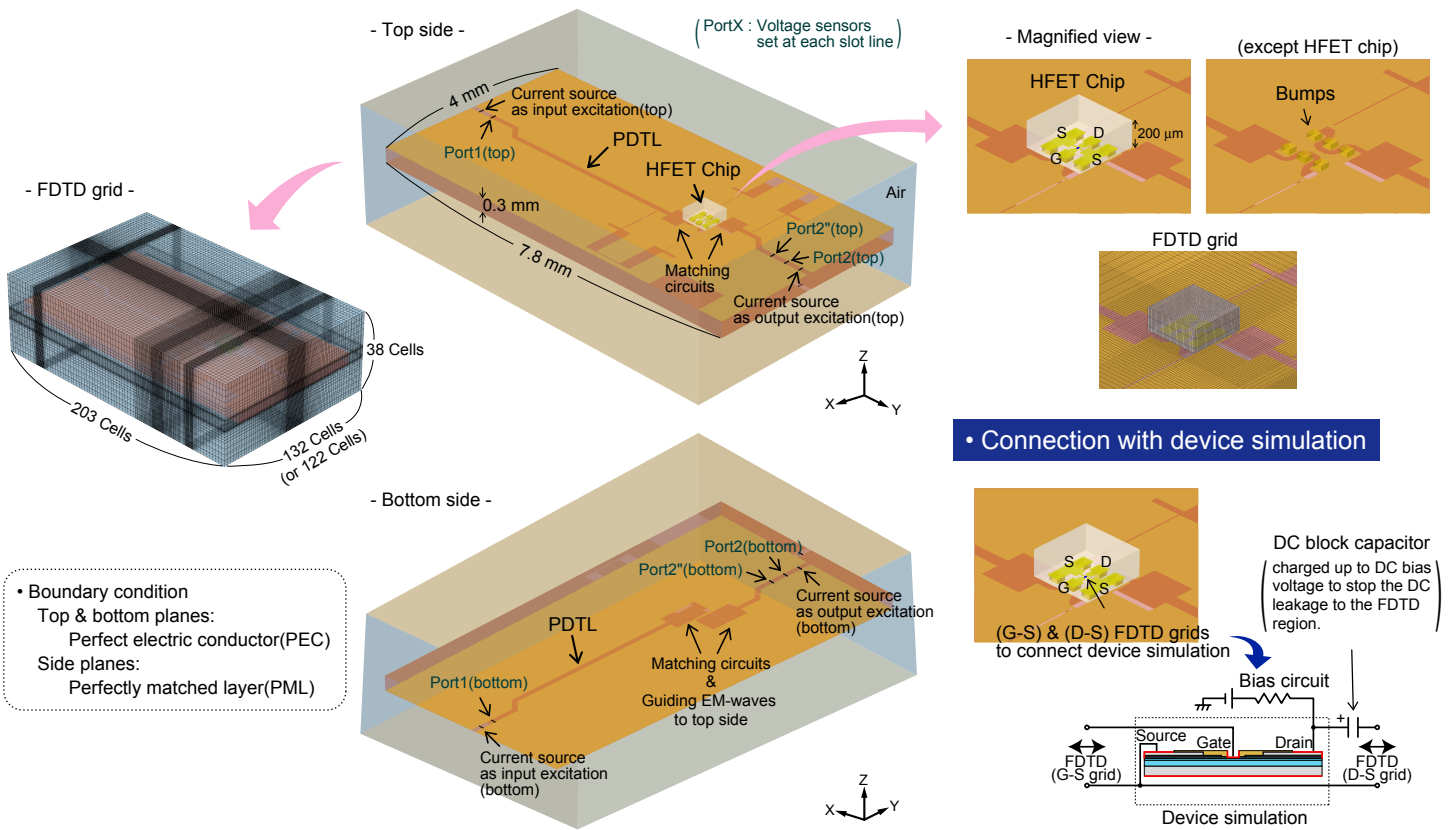
• Configuration for 2D simulation



• Comparison of S-parameters



CONFIGURATION FOR FDTD SIMULATION

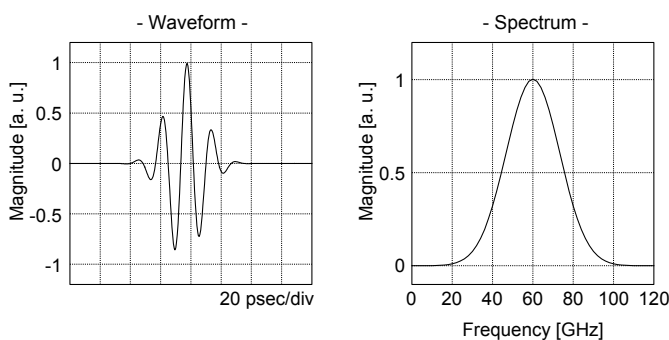


EXCITATION PULSE SHAPE

A product of a Gaussian function and a sine function :

$$s(t) = A \cdot \exp\left(-\frac{(t-t_0)^2}{2\sigma_t^2}\right) \cdot \sin(2\pi ft)$$

Reduction at unnecessary bands → Good convergence



DERIVATION OF S-PARAMETER

