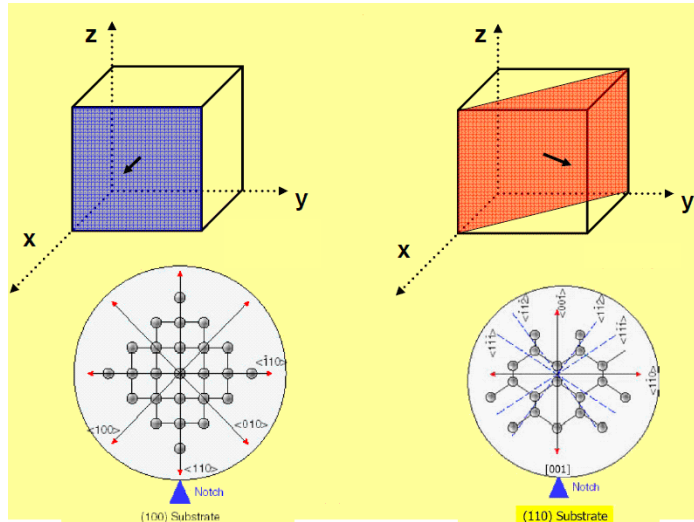
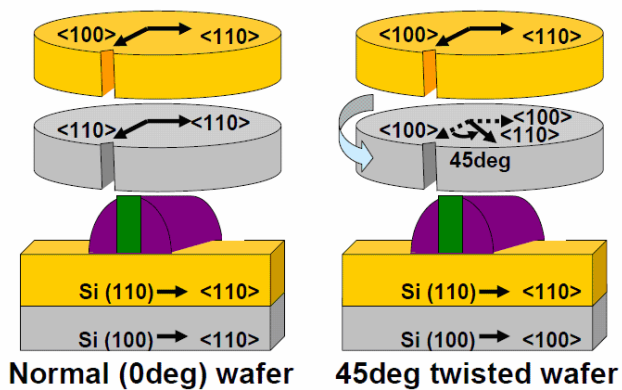


## Appendix

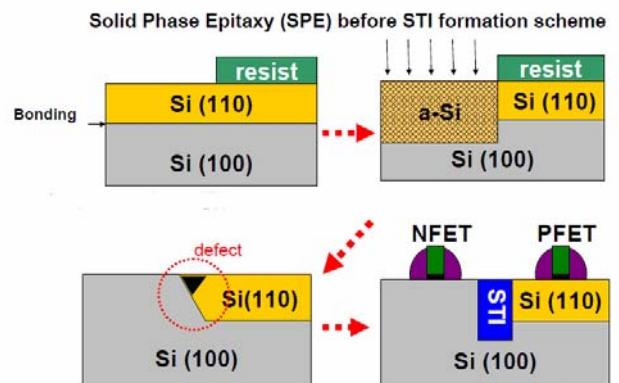
### 1. Two silicon crystal face



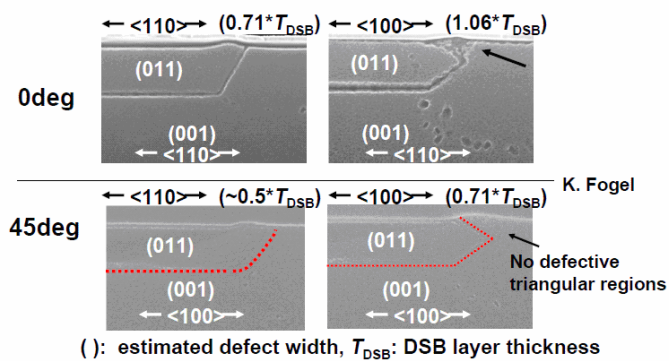
### 2. Two types DSB wafer



### 3. Process Flow of DSB wafer fabrication

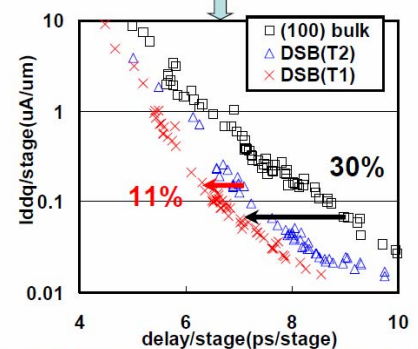


### 4. Cross section of defection



### 5. Improve of Ring Oscillator

**Ring oscillator**  
Higher  $I_{on}$  + lower  $C_j$  + lower  $C_{ov}$  + equivalent NFET performance



Thin DSB wafer demonstrates 11% faster ring oscillator speed over thick DSB wafer and 30% faster over (100) bulk