$$ICCost = \frac{DieCost + DieTestCost + PackagingAndTestCost}{FinalYield}$$

$$DieCost = \frac{WaferCost}{DiesPerWafer \times DieYield}$$

$$DiesPerWafer = \frac{\pi \times WaferRadius^2}{DieArea} - \frac{\pi \times WaferDiameter}{\sqrt{2 \times DieArea}}$$

$$DieYield = WaferYield \times \left(1 + \frac{DefectDensity \times DieArea}{\alpha}\right)^{-\alpha}$$

$$DefectDensity \approx 0.4 \rightarrow 0.8/\mathrm{cm}^2$$

$$\alpha \approx 4$$