



Order to Shinetsu

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Indico agenda:

- *Offer received 11/6/2014*
 - 25 wafers 11'993.00 CHF (447.32 CHF/wafer)

- *Critical technical aspects*
 - Epitaxial layer variation: $\pm 5\%$ in a wafer and $\pm 5\%$ from wafer to wafer from nominal 130 μm thickness -> 105 μm to 156 μm (added as sum of the two limits)
 - Resistivity: 500 \div 2500 Ωcm

- *On the variation of thickness there is nothing we can do: take it or not order*
- *On the resistivity we considered that 500 Ωcm is too low: asked to increase.*

Answer:

 1. The spec of the epi resistivity can be raised to $>700 \Omega\text{cm}$ without an extra charge.
 2. For the spec of $>1000 \Omega\text{cm}$, the price is to increase about 13% (due to selection).

- *For 700 Ωcm the depletion is 170 $\sqrt{\text{cm}}$, definitively too high for 3D.*

- *How do we proceed?*