



Science & Technology
Facilities Council

Costing for TPAC1.1

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Costs as from tender

Item	Details	Quotation price	Special discount	Price after discount
shuttle	12 shuttle wafers with 1cm ² 12uEPI	£51.5K	£17.5K	£34K
Full 6LM mask set	full mask set 6LM+HIPO+MiM+DNW+stitching	£105K	£11K	£96K
Full Mask Set 4LM	full mask set 4LM+HIPO+MiM+DNW+stitching	£90K	£8.5K	£91.5K
Proto 6LM	proto lot of 12 wafers 12u EPI	£20.5K	£3.5K	£17K
Proto 4LM	proto lot of 12 wafers 12u EPI	£17K	£3K	£14K
Total 4LM		£158K	£29K	£129K
Total 6LM		£177K	£32K	£145K

Requested TPAC1.1 split plan

- 0) 6 wafers with 12 um EPI and deep P well
- i) 3 wafers with 12 um EPI and no deep P well
- ii) 3 wafers with 5um EPI and deep P well
- iii) 3 wafers with **high-resistivity EPI*** and deep P well

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discounted price for shuttle service of 4 seats (4 x 5x5mm) is £34,000.

- The price above is for a single GDSii and includes 3 wafers (80 bare parts) of this GDSii packed in special shipping trays

Price for additional 12 engineering wafers (240 bare parts): £12,000

Engineering fee (split execution + handling of non-standard starting material): £7,500

This cost is related to the number of splits (not simply linear)

High-resistivity epi

Normal resistivity: ~ 10 Ohm cm

Special wafers > 1kOhm cm

Starting specification for thickness (as from e-mail discussion): 18 um \pm 1.5 um

Full depletion achieved for diode bias as low as ~ 0.4 V

Budgetary quote:

Minimum order quantity is 100 wafers

Total cost: ~ £ 4,500

Delivery time: 8-10 weeks

Proposed timing for shuttle run:

17 July 2008 \rightarrow tapeout

July 2008 \rightarrow manufacturing of splits

3w. from 0)

3w. from i)

3w. from ii)

~ August 2008 \rightarrow manufacturing of splits

3w. from 0)

3w. from iii)