

130nm Technology

Old vendor of 130nm CMOS:

Fabrication services for sale Contact people fired Existing contract valid until end 2015 around the time when we produce our chips



Alternative technology

TSMC 130nm CMOS via IMEC (Belgium) Similar to old technology (simulations show as good or better analog performance)

Monthly MPWs Engineering run cost ~ 300 k\$ (cf ~ 450 k\$) 6 week delivery (good experience of fast deliveries so far) Available now to Europractice subscribers

Radiation tolerance untested (programme started) MPW die size > 25mm2 (can be negotiated.....)

Work in progress: Design of radiation test structures – tests in ~ 3 months Full mixed-signal design kit in preparation (few months) Training will be organised soon Common IP blocks to be shared 2

LHCb electronics, 10th April 2014



Sub-detector strategy

VeloPix for Velo: Change immediately to TSMC

PACIFIC for SciFi:
Finish design for May MPW with old vendor (chips available for detector tests)
Then change to TSMC
SALT for UT:
Change immediately to TSMC

GBT chips will be produced as soon as possible (old vendor)