

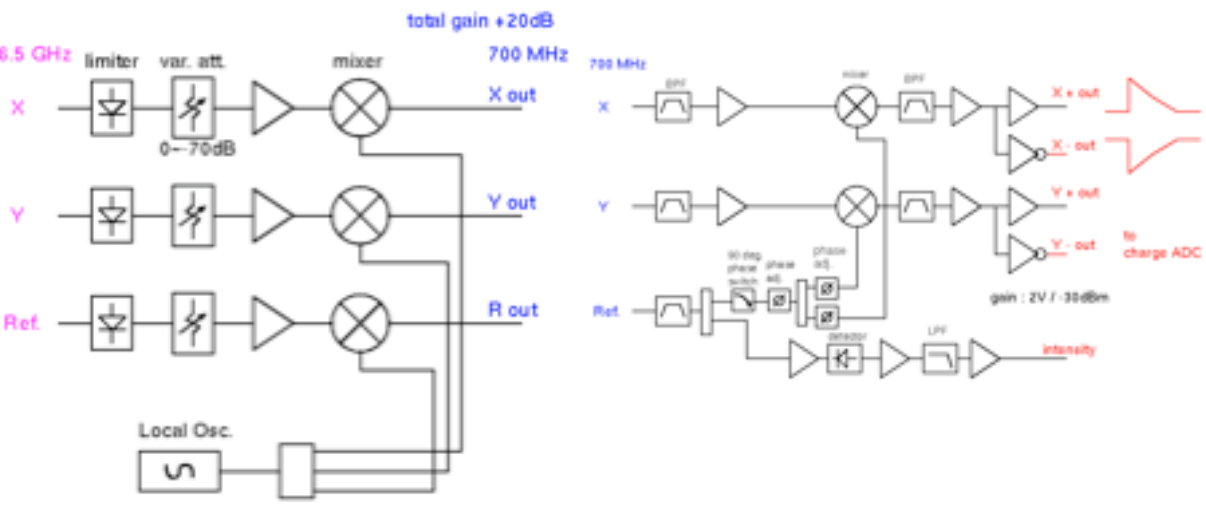
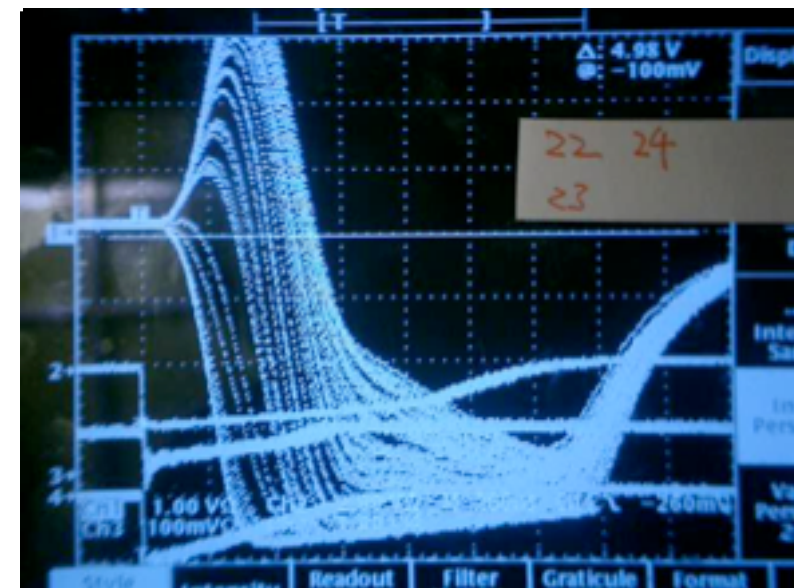
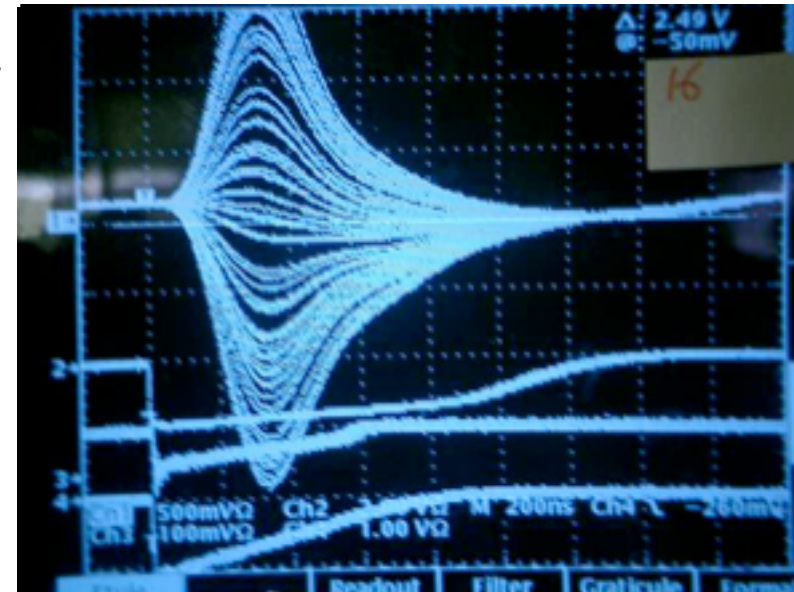
Prototype test

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01 Jul. /05
PAL Meeting

- Problems in KEK-BPM
- Items to test

Problems in KEK-BPM

- Problems in KEK-BPM
 - Smaller coupling than expected (understood by simulation)
 - poor X-Y isolation
 - Strange signal shape
- coupling and X-Y isolation can be measured by bench test.
- Beam test is necessary.

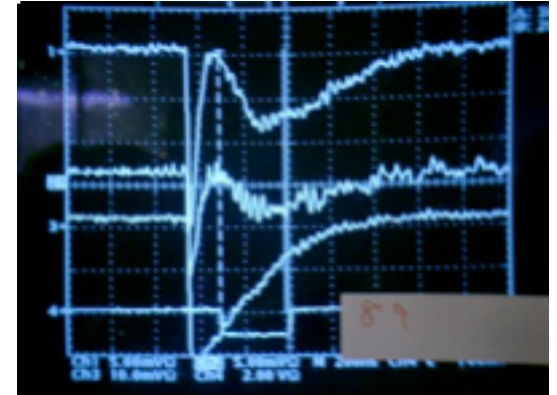
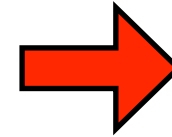
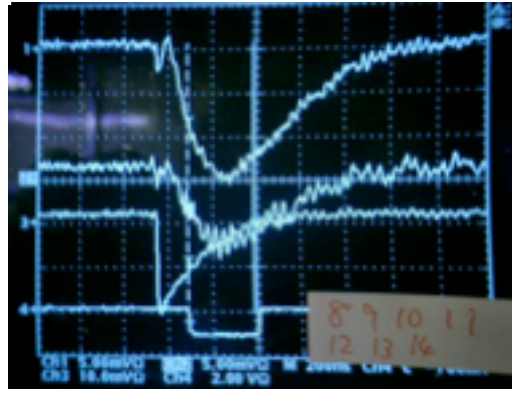
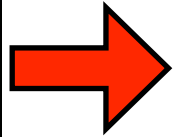
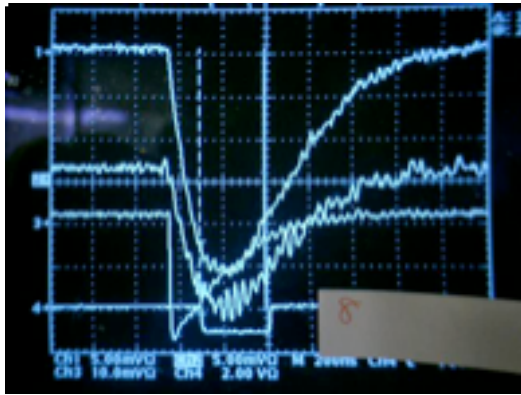
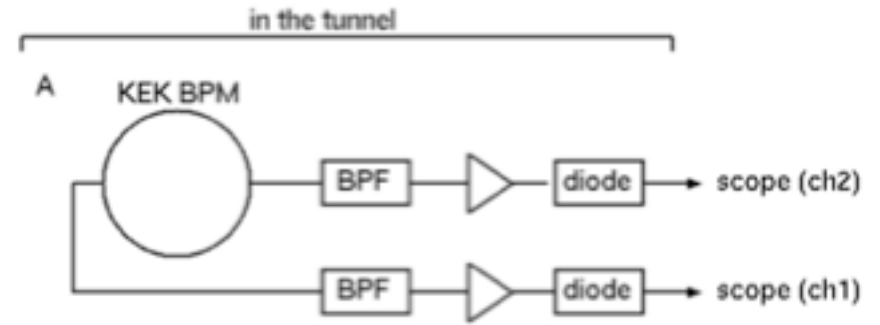


vertical steering in roughly 50 micron step.

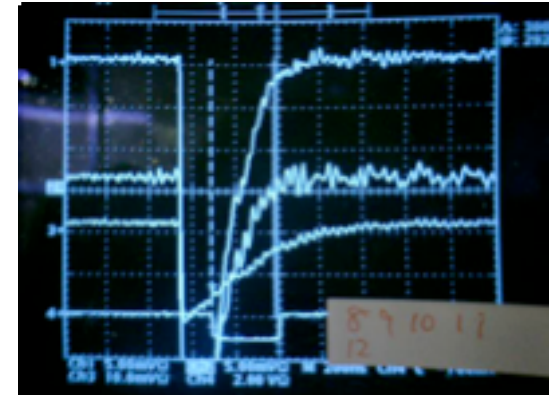
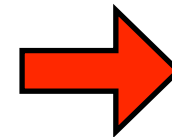
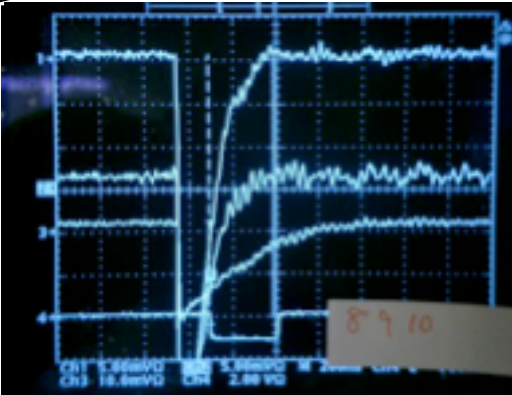
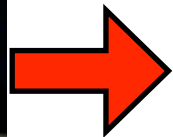
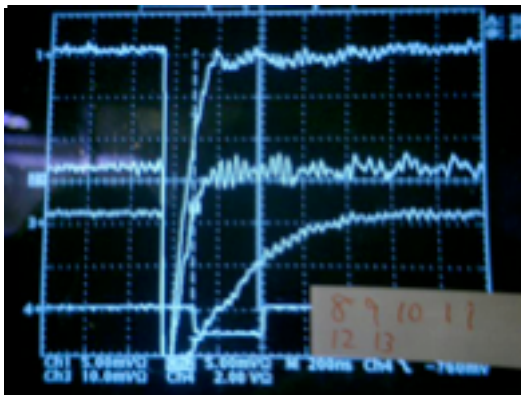
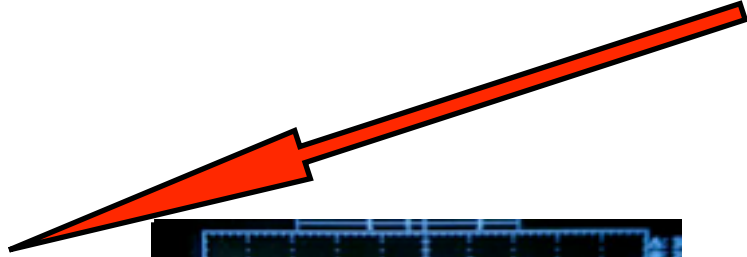
ch1: y1 (left), ch2: y2 (right)

y1 and y2 output same signal.

Pulse shape changes up-side and down-side of the BPM.



center



Test items

- Bench test
 - basic properties (prototype and real model)
 - frequency, Q_{load} , decay time, coupling(Q_{ext})
 - X-Y isolation, port symmetry
 - electrical center (only with prototype)
- Prototype
 - with/without dents
 - before/after brazing
- Beam test
 - signal shape
 - with SLAC electronics