

Status of shaper prototype production

B.G. Cheon (Hanyang U)

Dec. 10-12 @ KEK

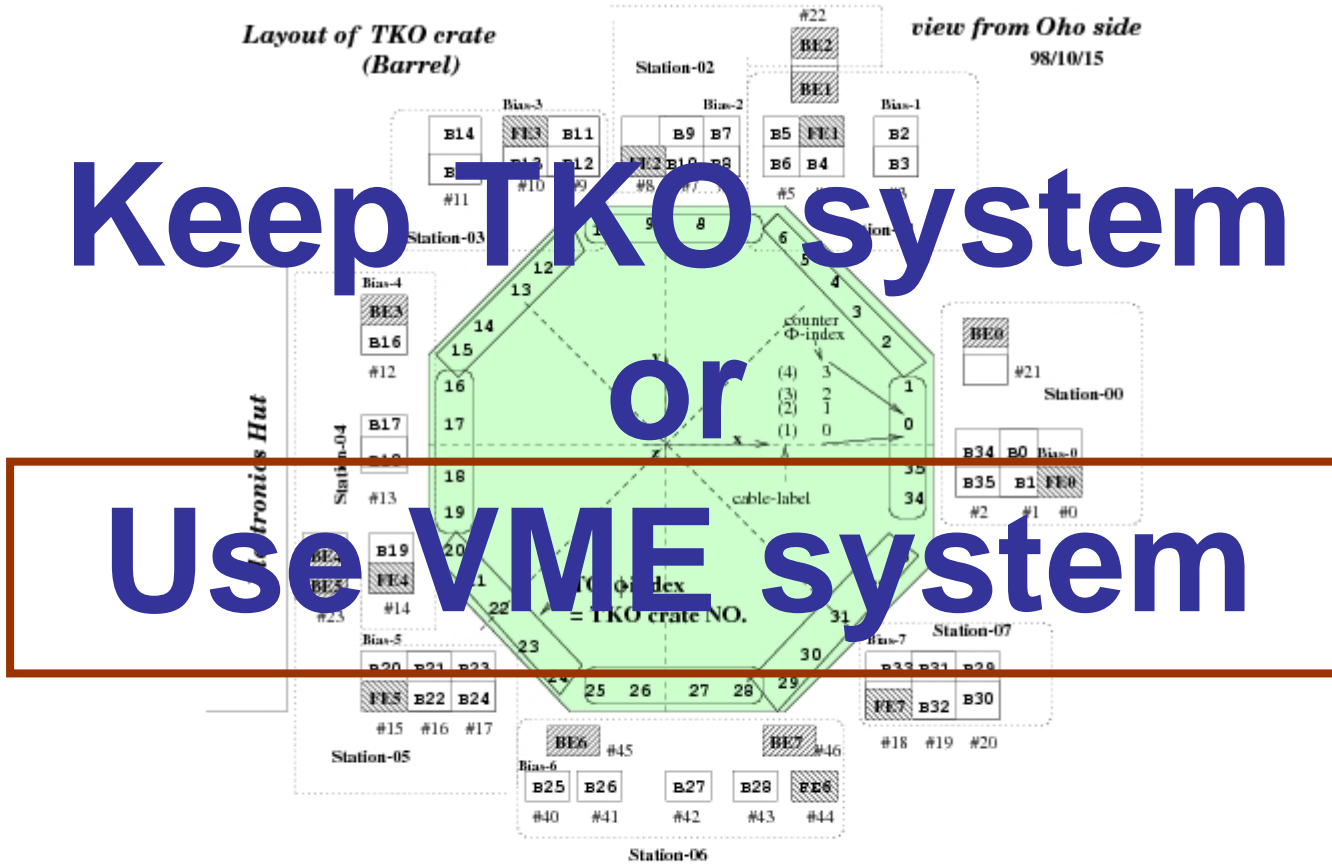
1st open meeting of the Super KEKB Collaboration

52 TKO crates

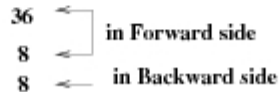
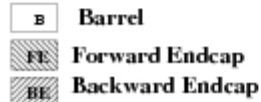
Keep TKO system
or
Use VME system

Layout of TKO crate
(Barrel)

view from Oho side
98/10/15



Crate naming convention.



#0-#23: 8U rack #
#40-#46: 4U rack#

Barrel: 184 x 36 = 6624 ch.
Forward Endcaps: 144 x 8 = 1152 ch
Backward Endcaps: 120 x 8 = 960 ch

Informal meeting

- Date & place : Aug/25/2008 @ KEK
- Attendants :
A. Kuzmin, Y. Usov (BINP) I. Nakamura (KEK) B.G. Cheon (Hanyang)
S.Y. Kim (Notice-Korea Co.)
- Discussion item :
on prototype production and mass-production of ECL Shaper in Korea.
- NKC has been involved in Belle ECL trigger modules production.
- NKC plan to work on ECL trigger module R/D for Super Belle.

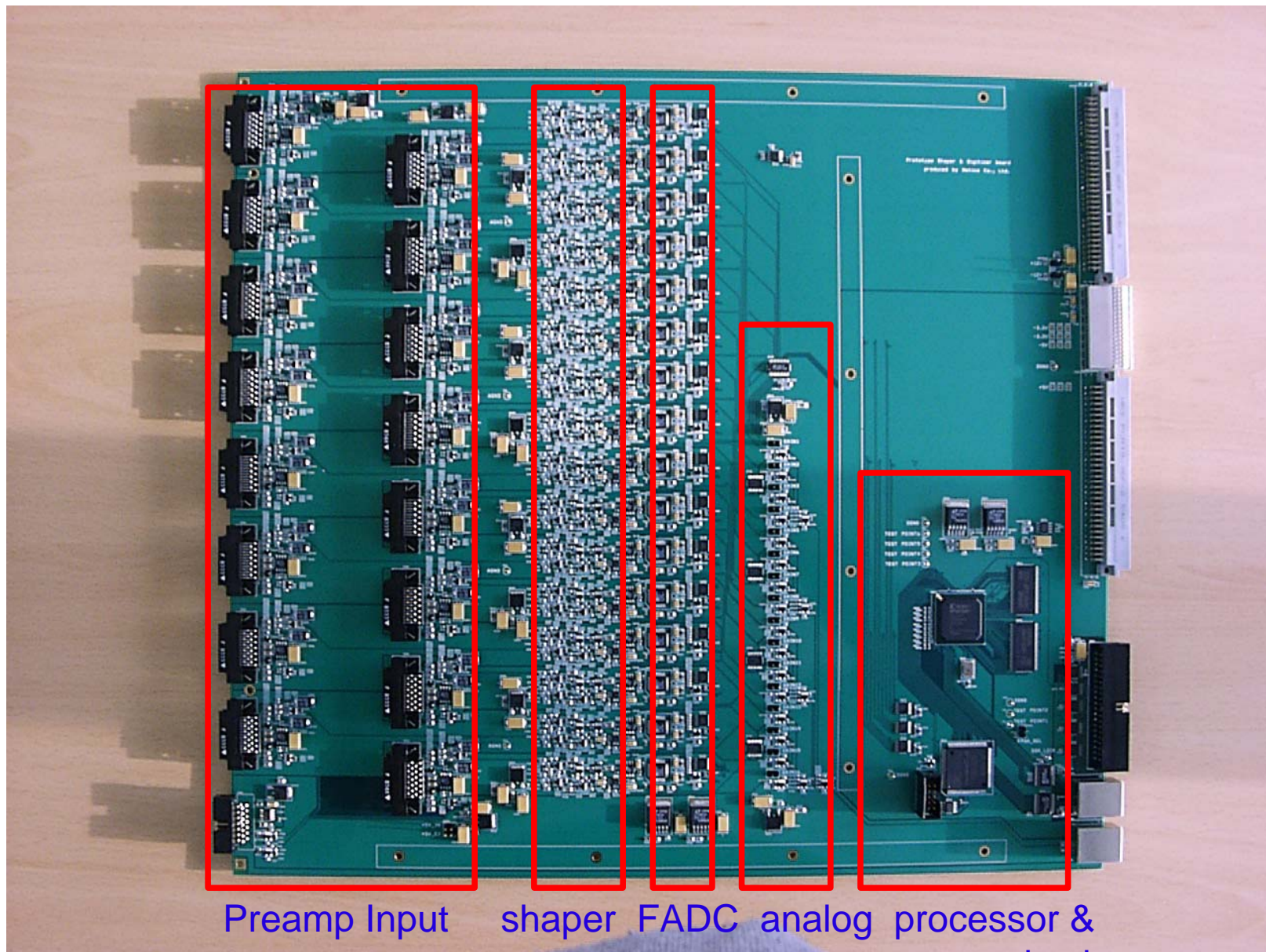
Meeting Minutes

- Production term : 2-3 months depending on the availability of shaper-related electric parts in the market.
 - Delayed couple of weeks due to minor tuning of board design.
- Final confirmation should be done with Y.Usov if schematic diagram and PCB layout are ready.
 - Done correctly.
- Two modules will be produced for 1st VME-type prototype test.
- Two turns of prototype production until final mass-production module.
- Mass-production module should be ready by the end of 2009 in terms of anticipated mass-production schedule(~2 years).
- Mass-production in Korea will be positively discussed later.

Current Status

- A schematic design had been based on TKO version.
- Some modifications were performed after the discussion with Y.Usov.
- Purchase of all the parts was done in Oct.
- Board layout (9U-size, 6-layers) was finished in Nov.
- Schedule of the 1st prototype board production/test
 - ✓ PCB production : done in Nov.
 - ✓ Soldering : done in this week.
 - ✓ Basic test : 2 weeks (power line and analog part w/ pulse gen.)
 - ✓ Shipping to KEK : End of December (if no mistake is found)
 - ✓ Detail test : from Jan/2009 @ KEK
- Revision of the board (production of the 2nd prototype) will take much short term because we already have all parts and much less effort is necessary.

New VME Shaper board



Preamp Input

shaper

FADC

analog
sum

processor &
communication

Backup Slide

sBelle ECL Trigger electronics

