

BOR

Current Status

Gaku Mitsuka (KEK, Acc. Lab)

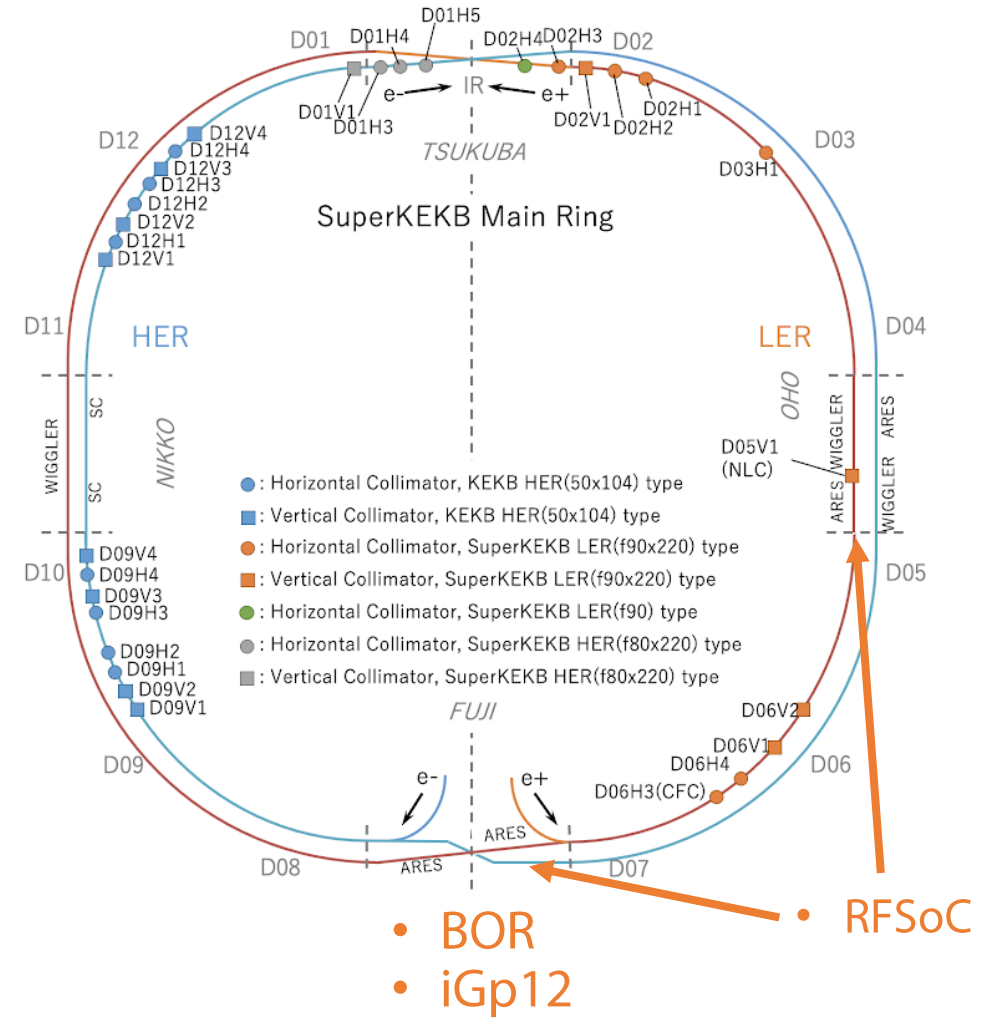
US-Japan Beam Monitor Workshop
University of Hawaii, 19 Feb. 2025

Bunch Oscillation Recorder (BOR)

- Bunch-by-bunch BPM + ring buffer memory = BOR
- BOR saves the bunch position information over a few or several dozen turns just before the beam aborts.

HER	Location	ADC bit	RF sync.
18K10 BOR	Fuji Upward	8	Yes
iGp12 BOR	Fuji Up & Down	12	Yes

LER	Location	ADC bit	RF sync.
18K10 BOR	Fuji Upward → malfunctioning	8	Yes
iGp12 BOR	Fuji Up & Down	12	Yes
RFSoc BOR	Fuji Down & D05	12	Yes
Simple BOR (Oscilloscope)	D05 → uninstalled	8	No (5Gsps)
	D06 → uninstalled	8	No (2.5Gsps)



FUJI straight section



3

FB detector analog circuit

