

KVN Backed System

Taehyun Jung

2018MAR19 @ EVN-TOG, Shanghai, China



RTS



GPS

Clock

RTS



Sampler
(ADS-1000)

FILA10G

OTX

Rx Cabin

Observing Building

Recording System



OCTAD



Item		Description
ADC	Port #	1-4
	ADC	ADC
	Input BW	0.1-24GHz
	Sampling	Max 16384Msps
	Quantization	3bit
SPM	SPM #	1-4
	Mode	DBBC, THROUGH mode
	Port #	1-4
Output	Interface	10GBase-SR SFP+ LC
	Protocol	IP/UDP/VDIF

KYS



KUS



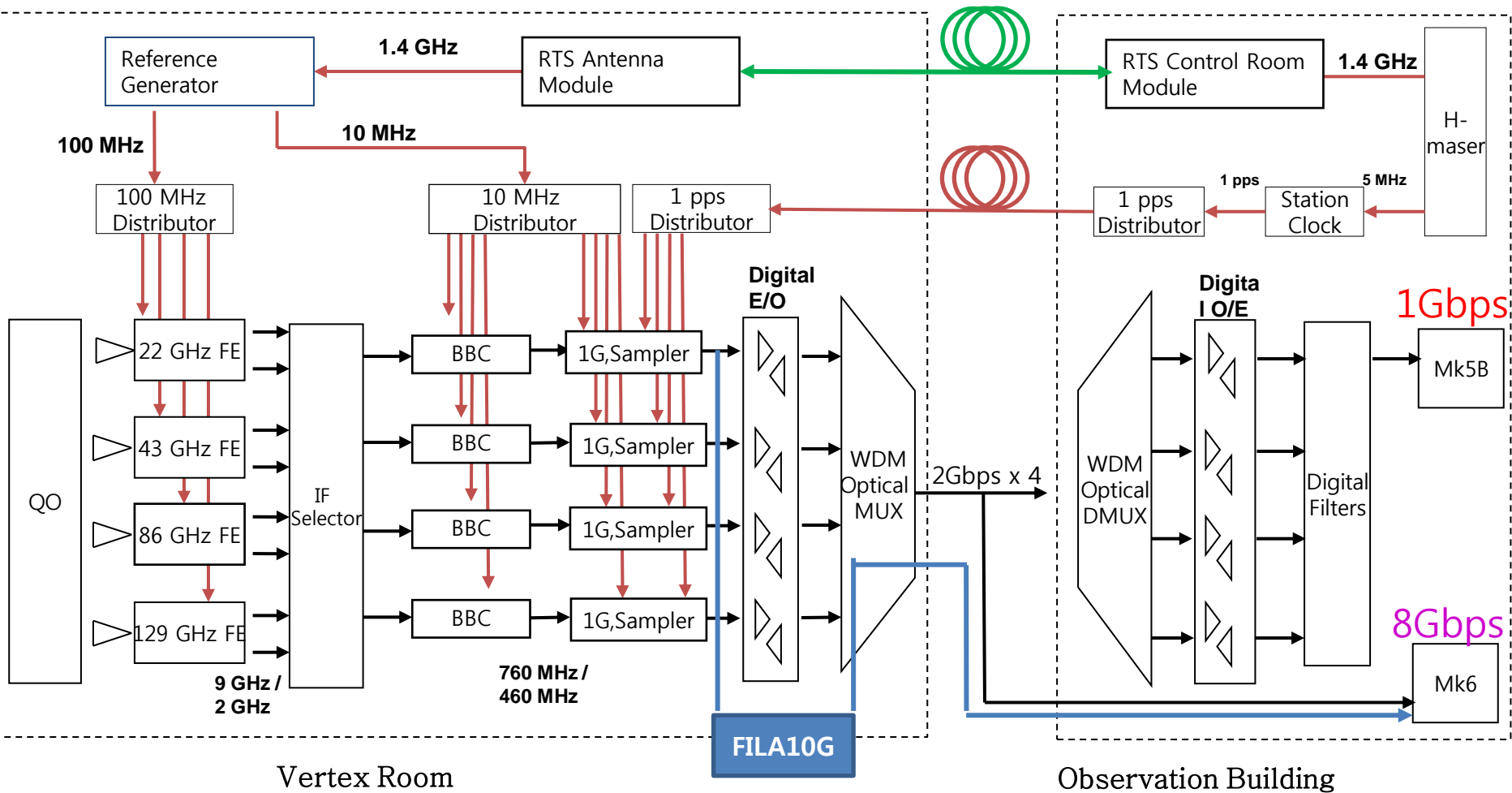
KTN



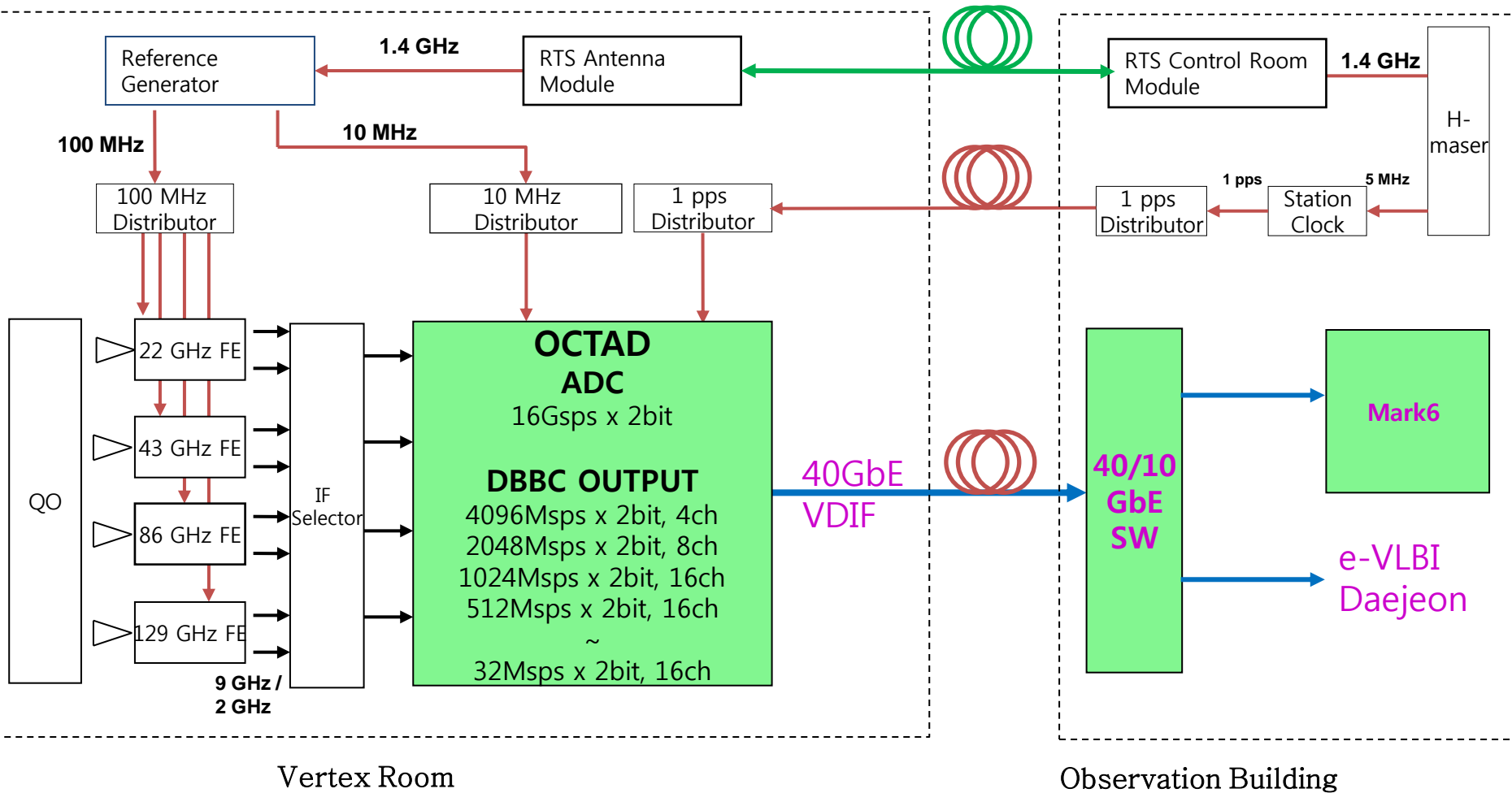
OCTAD by Elecs Industry Co.

NAOJ(VERA, NRO45), NICT, Ibaraki Univ. KVN

KVN Backend System (current)



KVN Backend System (upgrade)



KDAS

Mode	Band Width [MHz]	Output Streams	Bits/Sample	Output Data Rate [Mbps]	Output Clock Speed [MHz]
1	256	1	2	1024	32
2	128	2	2	1024	32
3	64	4	2	1024	32
4	32	8	2	1024	32
5	16	16	2	1024	32
6	8	16	2	512	16
7	64/128	2/1	2	1024	32
8	32/64/128	2/1/1	2	1024	32
9	32/128	4/1	2	1024	32
10	16/32/128	2/3/1	2	1024	32

OCTAD-K

Unit	Sampling Mode	Sampling Speed [Mpspl]	bits/sample	ADC 8192Mps Standard		ADC 16384 / 20480 Mps (Option)	
				No. of Output channels (MIN) ▲ 1	No. of Output channels (MAX) ▲ 2	No. of Output channels (MIN) ▲ 1	No. of Output channels (MAX) ▲ 2
OCTAD	DBBC	4,096	2	1	4	1	4
		2,048	2	2	8	2	8
		1,024	2	4	16	4	16
		256	2	4	16	4	16
		128	2	8	32	4	16
		64	2	8	32	4	16
		32	2	8	32	4	16