

IAEA TM CODAC 2019
May 13 – 17, 2019 | Daejeon

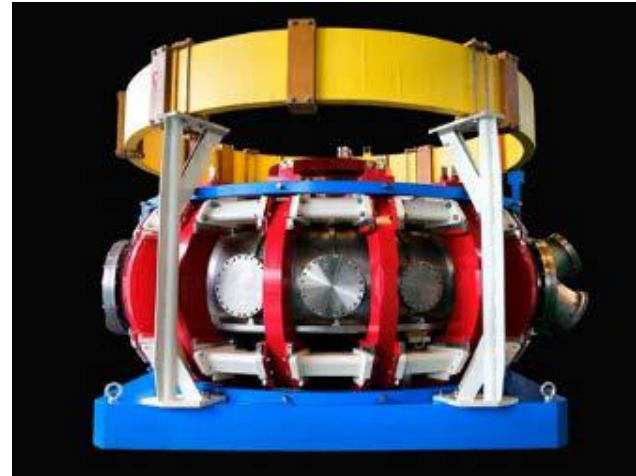
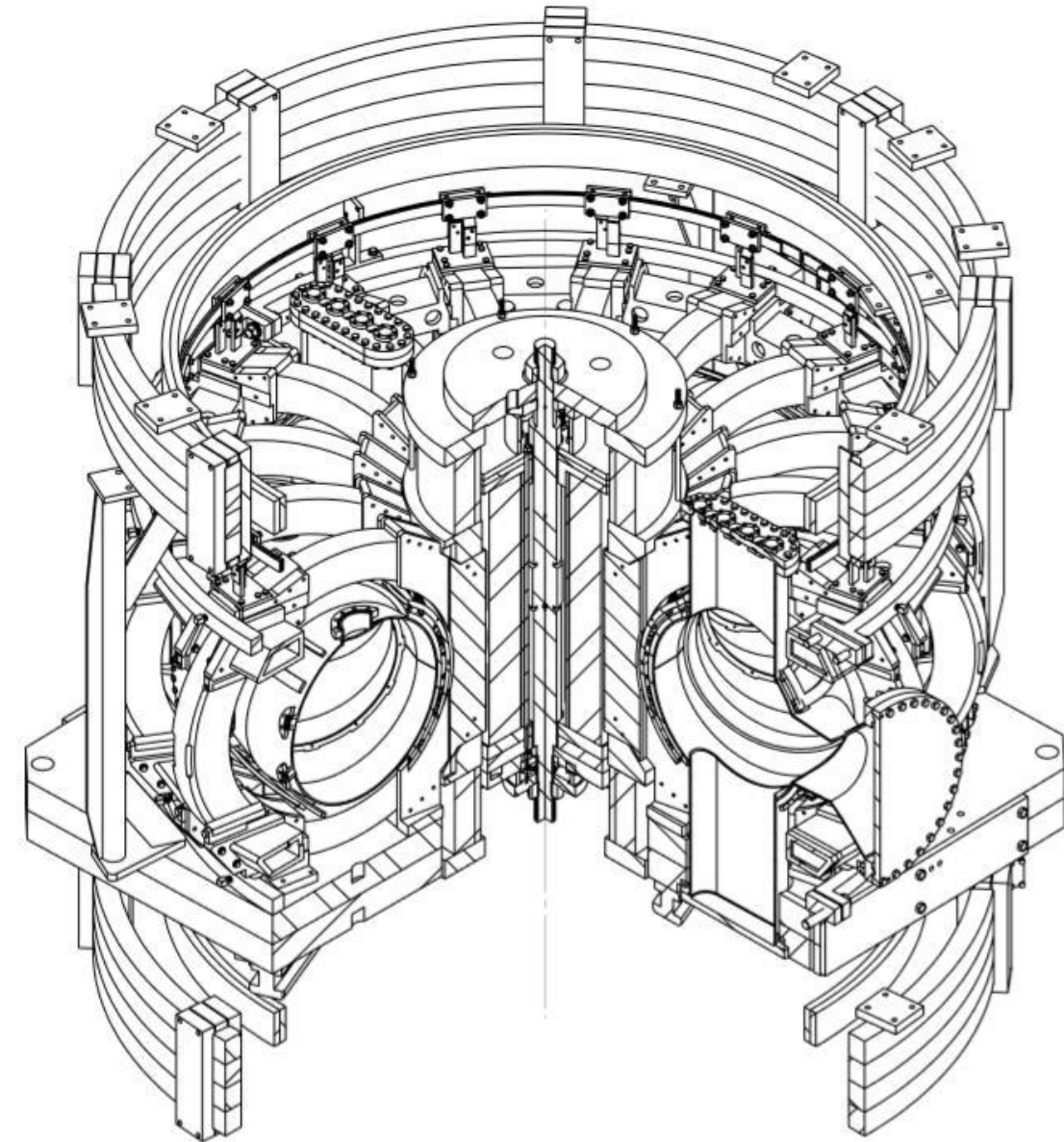
Design and development plan for control and data acquisition system of **Thailand Tokamak 1 (TT1)**

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HT-6M Tokamak



Main Radius, R (m)	0.65 m
Minor Radius, a (m)	0.2 m
Plasma current, I_p (kA)	150 kA

Toroidal Field (TF)

16 coils

1. Toroidal field(B_T)

1.52 Tesla

2. Max. Ripple (δ)

6.53 %

3. Turn current (I_{TF})

7.64 kA

4. Flat top time(τ)

100 ms

Poloidal Field (PF)

7 coils

1. Central Solenoid coils (CS)

1 pieces

2. Ohmic Heating coils (HF)

4 coils

3. Vertical Field (VF)

2 coils

4 Year Plan for HT-6M Reconstructing

Structure (Donated by ASIIPP)

- Vacuum Vessel 1 set
- Toroidal Field (TF) 16 coils
- Poloidal Field (PF) 7 coils

A.D. 2020 - 2022

Diagnostic (University in Thailand)

HCN Interferometer	Soft x-ray array
Optical Diagnostic	CCDs Diagnostic
AXUV Diagnostics	HXR Diagnostics
LP Diagnostics	SXPHA Diagnostic
ECE Diagnostic	

A.D. 2020 - 2021

ASIIPP

- Vacuum System
- Power Supply System
- Plasma Control System
- Data Acquisition



A.D. 2022 - 2023

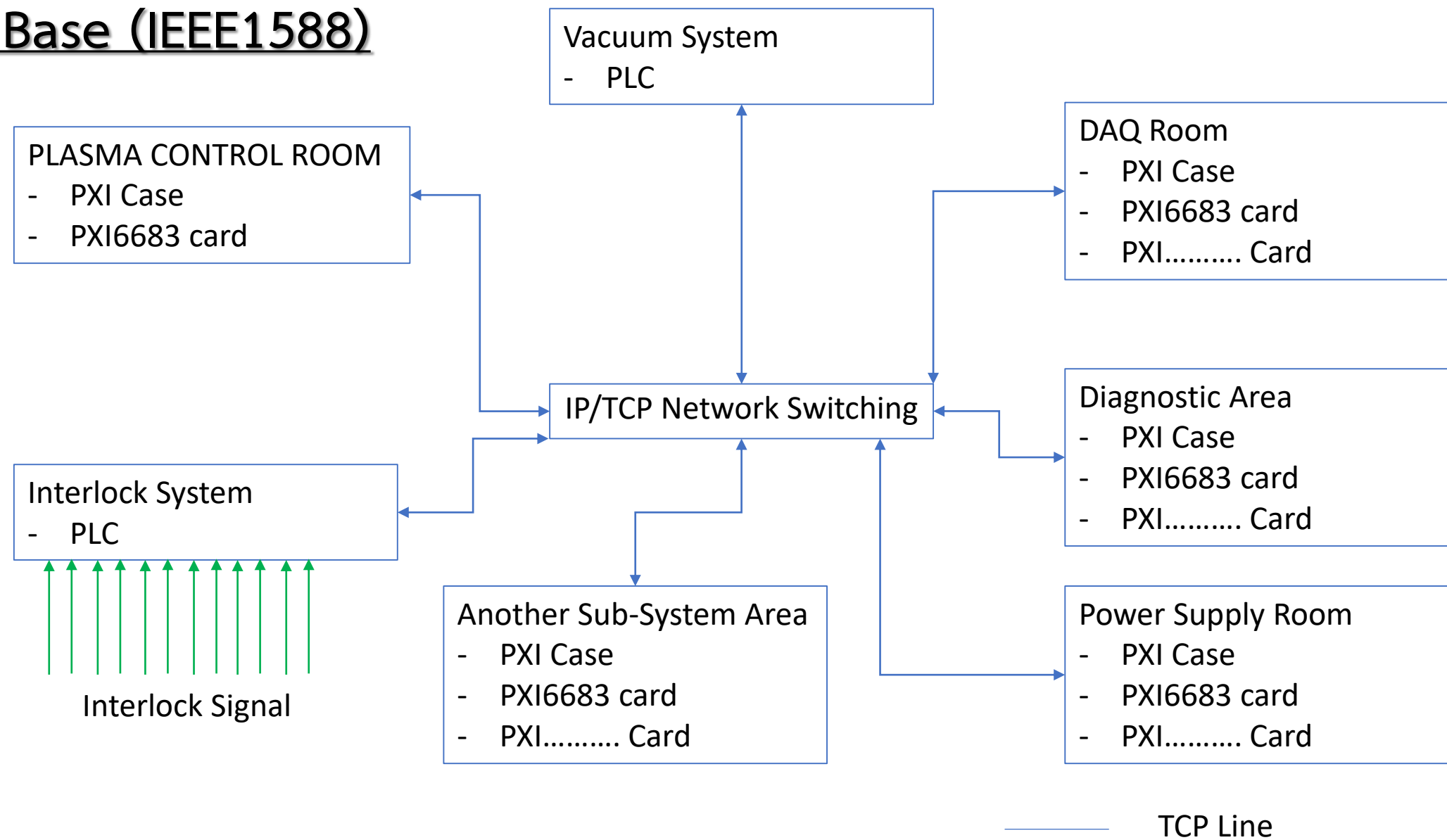
A.D. 2020 - 2021

Building (TINT)

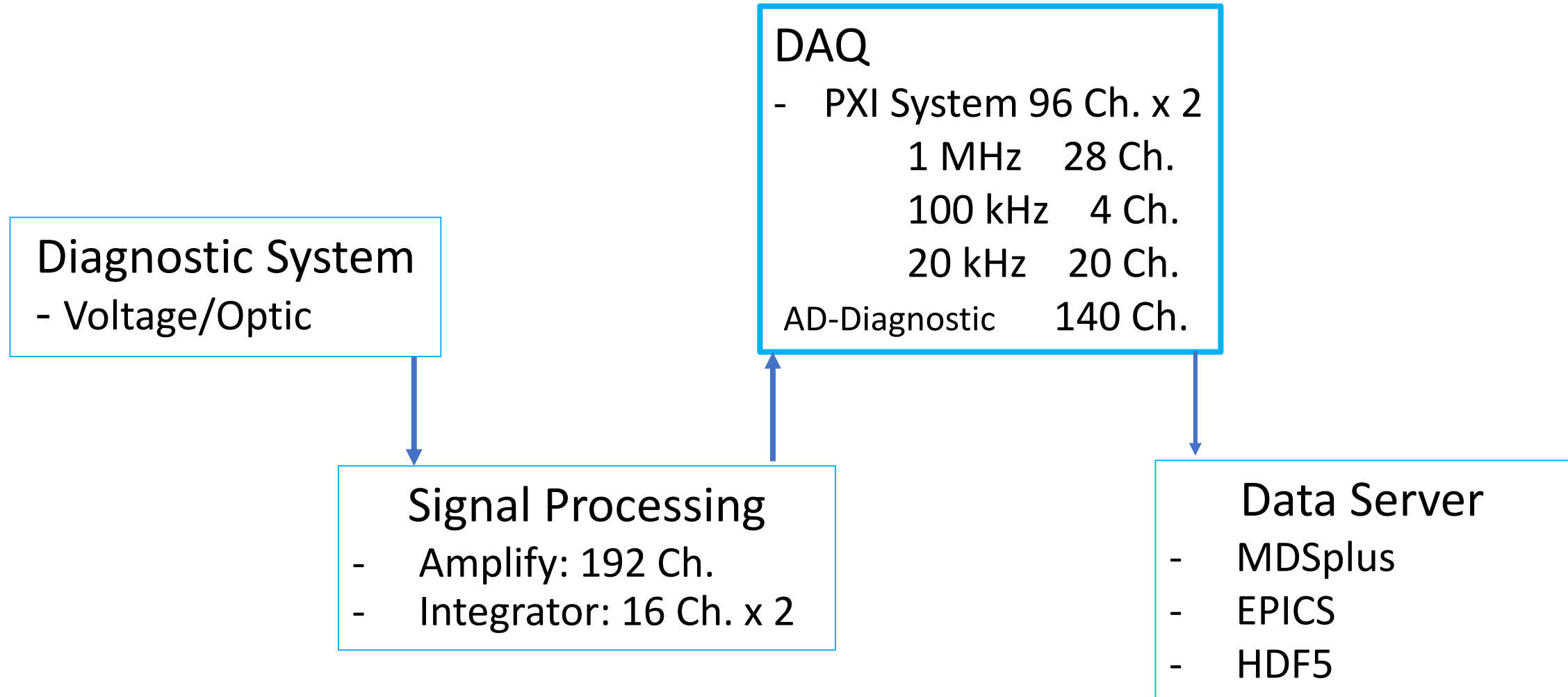
- Structure
- Control Room
- Office
- Workshop

Plasma Control System and Data Acquisition

Time Base (IEEE1588)



Plasma Control System and Data Acquisition: DAQ



Thank You

Acknowledgement

This work was supported by the Government Annual Research Budget through Thailand Institute of Nuclear Technology (Public Organization).

Thanks for the donation of HT-6M from ASIPP. Thanks to an advisor from ASIPP, CEA, and NIF which joining us in Asian school and fusion workshop in Thailand.