

Description of Hardware of UITF 200 keV Mott DAQ

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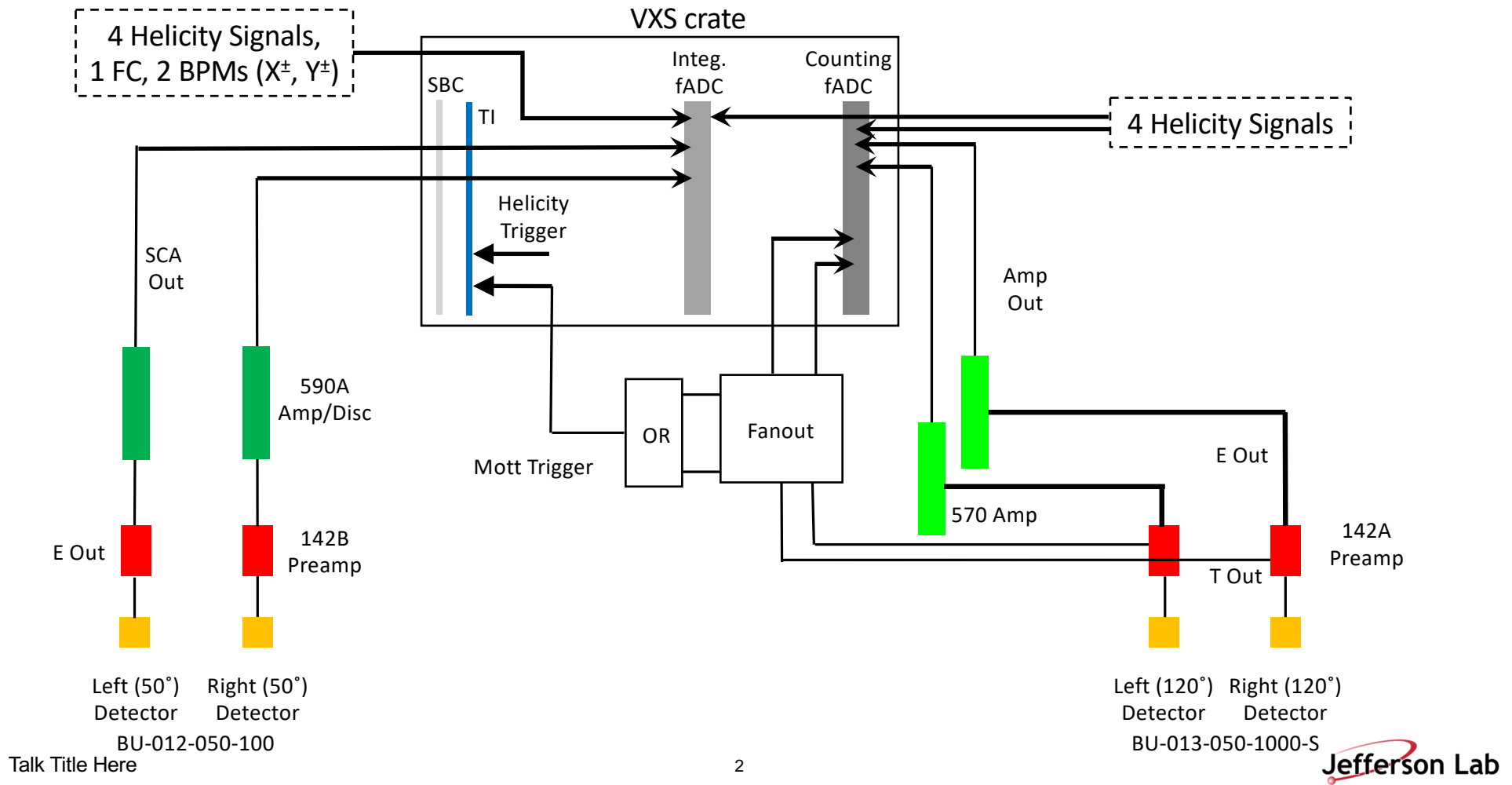
Saturday, January 15, 2022

Jefferson Lab

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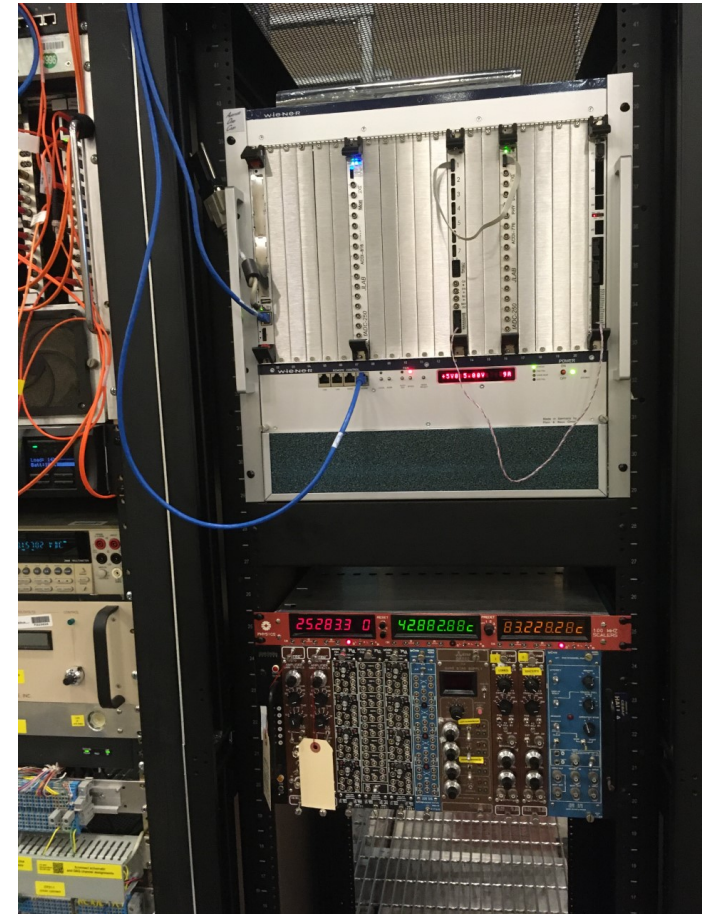


Upgraded Injector Test Facility – Mott data acquisition

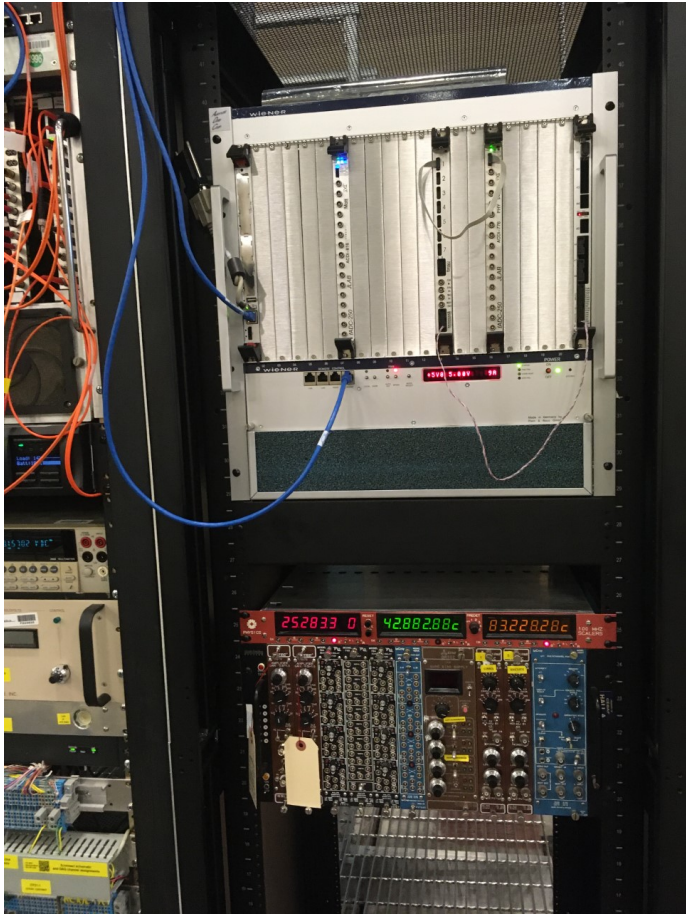


DAQ Hardware

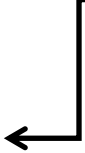
- Cable NIM Crate and VXS Crate
- Cables from detectors to NIM Crate
- Helicity signals from Helicity Board to VXS Crate



Mott DAQ



Hardware	Rack
itfmdaq0	ITF 07
Mott VXS Crate	IN02B21
Mott NIM Crate	IN02B21



Mott DAQ crates

VXS Crate

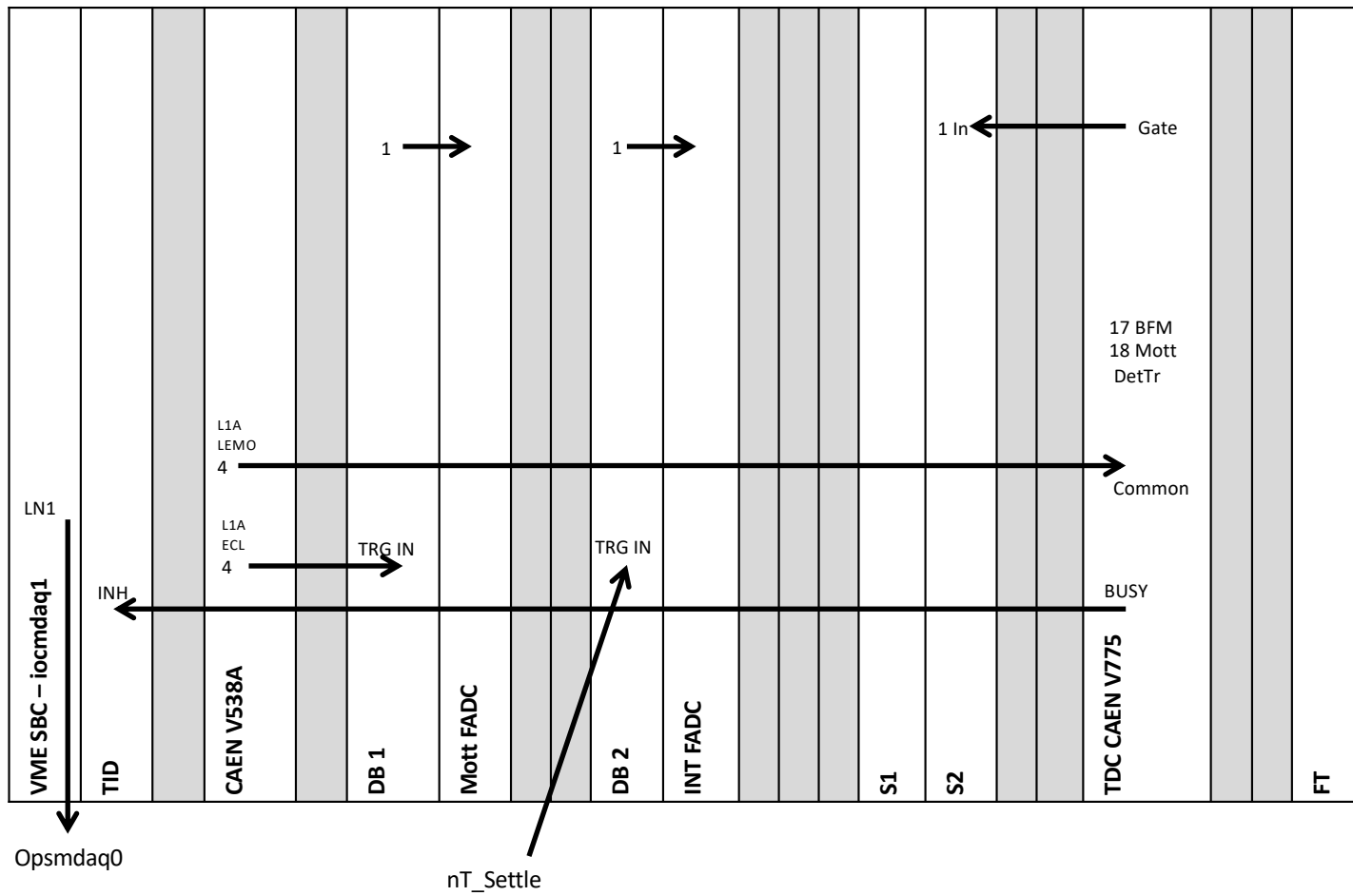
Slot	Board
1	Linux SBC
2	Empty
3	TID
4	Empty
5	Empty
6	Empty
7	Mott FADC
8	Empty
9	Empty
10	Empty
11	Empty
12	Empty
13	Distribution Board
14	Empty
15	Empty
16	PEPPo FADC
17	Empty
18	Empty
19	Empty
20	Empty
21	FT

Mott NIM Crate

Slot	Board
1	Amplifier
2	Amplifier
3	Empty
4	HV
5	HV
6	Empty
7	Amplifier
8	Amplifier
9	Empty
10	DUAL DELAY MODULE PS792
11	DUAL DELAY MODULE PS792
12	DUAL DELAY MODULE PS792

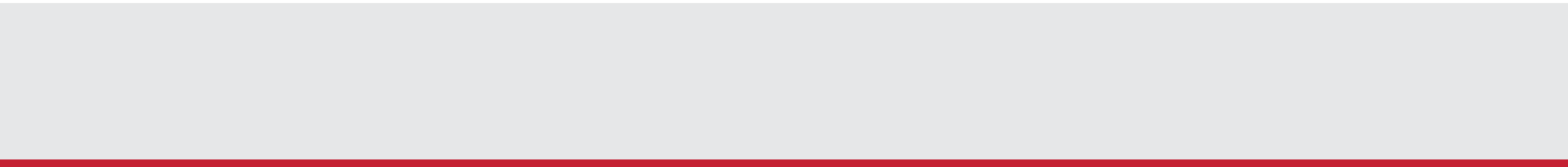


VXS CRATE



Mott NIM Crate

LIN 748 ΔE	Octal DISC 705 ΔE	TIM DISC 715 ΔE	QUAD Logic 754 <i>AND</i>	LIN 748 E	TIM DISC 715 E	QUAD Logic 754 <i>OR</i>			Delay 792	Delay 792	
<p>→ ΔE LEFT</p> <p>← FADC CH5 OD Ch1 TD CH1</p>	<p>→ ΔE LEFT</p> <p>← Veto</p>	<p>→ ΔE LEFT (2 ns Delay)</p> <p>← QL <i>AND</i> Ch1</p> <p>← S1 Ch13</p>	<p>→ ΔE LEFT</p> <p>→ Veto</p> <p>→ E LEFT</p> <p>← QL <i>OR</i> Ch1</p> <p>← S1 Ch5</p>	<p>→ E LEFT</p> <p>← FADC CH1 TD CH1</p>	<p>→ E LEFT (4 ns Delay)</p> <p>← QL <i>AND</i> Ch1</p> <p>← S1 Ch9</p>	<p>→ LEFT RIGHT UP DOWN</p> <p>← Mott DetTr S1 Ch2</p>			<p>→ ΔE LEFT 1+2+8 ns</p> <p>← LIN 748 CH1</p>	<p>→ ΔE RIGHT 4+8 ns</p> <p>← LIN 748 CH3</p>	
									<p>→ ΔE UP 0.5+4+8 ns</p> <p>← LIN 748 CH5</p>	<p>→ ΔE DOWN 1+4+8 ns</p> <p>← LIN 748 CH7</p>	



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