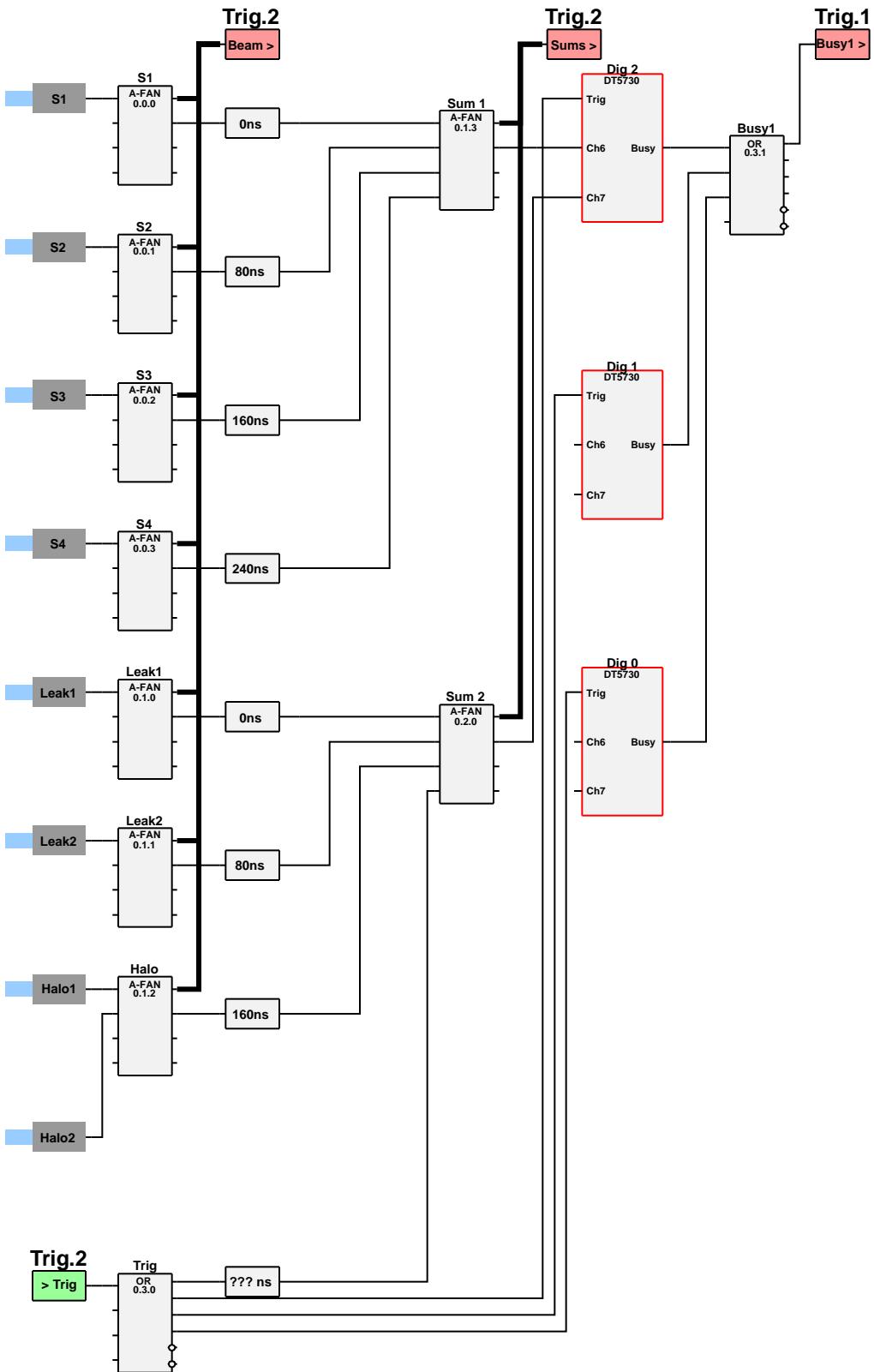
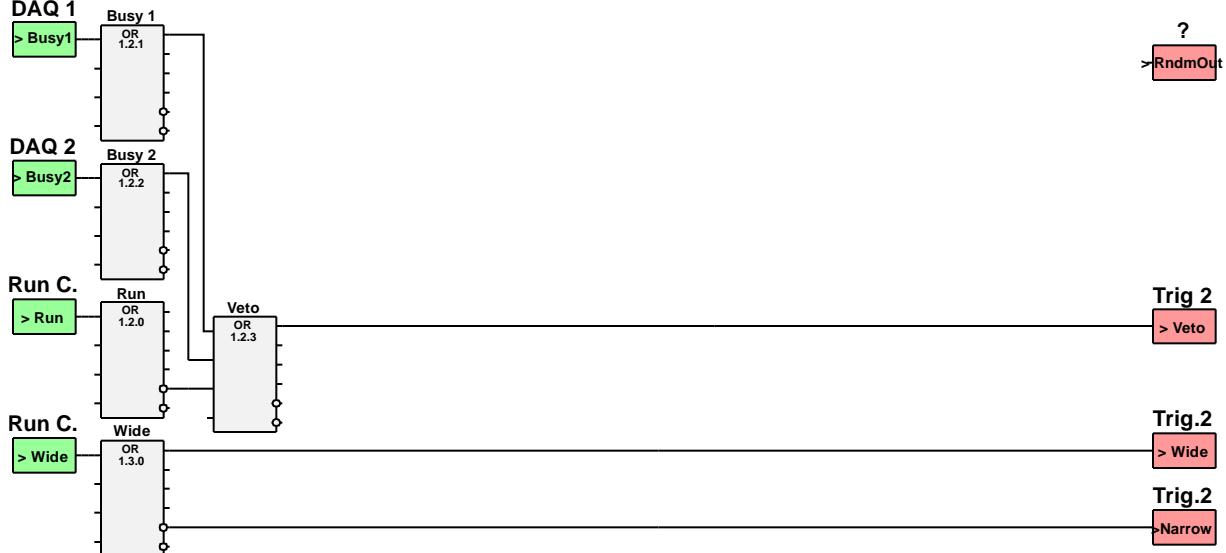
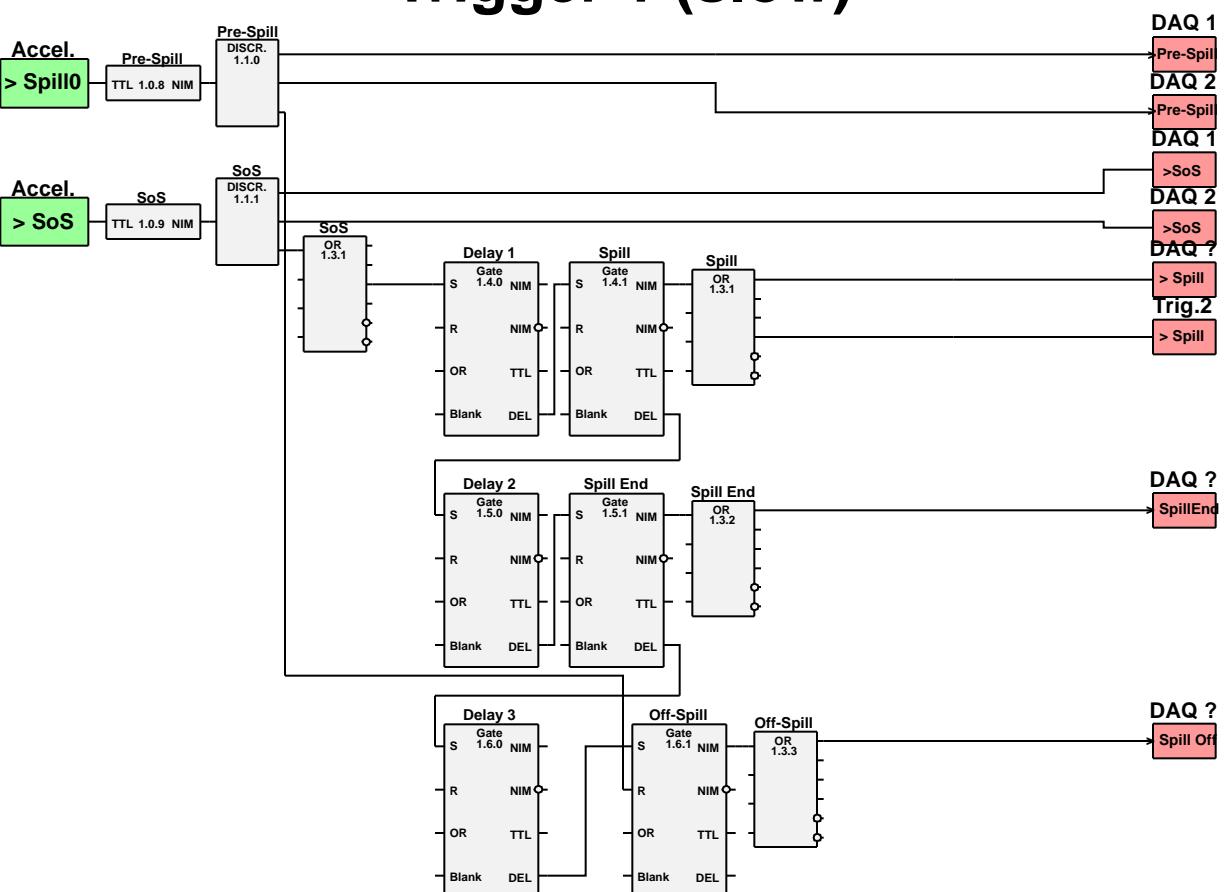


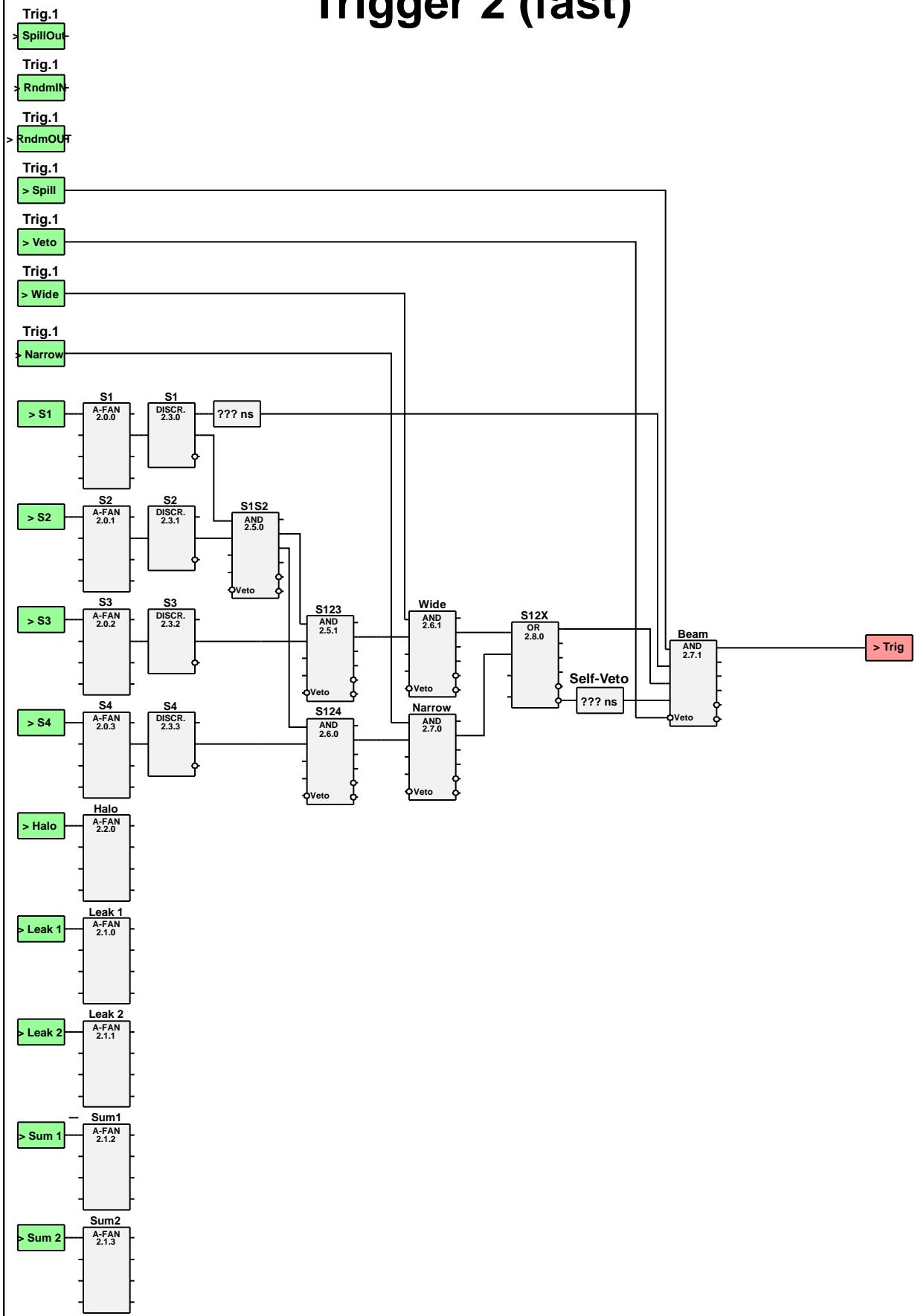
# Beam Area



# Trigger 1 (slow)



# Trigger 2 (fast)



Beam Area Crate								
A-FAN	A-FAN	A-FAN	4-OR					
S1	Leak1	Sum 2	Trig					
S2	Leak2		Busy1					
S3	Halo							
S4	Sum 1							

Trigger Crate 1 (slow)								
TTL-NIM	8 Discr	4-OR	4-OR	Gate	Gate	Gate		
	Pre-Spill	Run	Wide	Delay 1	Delay 2	Delay 3		
	SoS							
		Busy 1	Spill					
Pre-Spill		Busy 2	Spill End	Spill	Spill End	Off-Spill		
SoS								
		Veto	Off-Spill					

Trigger Crate 2 (fast)								
A-FAN	A-FAN	A-FAN	Discr 5		AND	AND	AND	4-OR
S1	Leak 1	Halo	S1		S1S2	S124	Narrow	S12X
S2	Leak 2		S2					
S3	Sum1		S3		S123	Wide	Beam	
S4	Sum2		S4					

- Convert schematic to landscape;
  - Re-arrange trigger for “Beam Area”;
  - Add pulser for Random\_in\_spill and Random\_off\_spill (calibration?);
  - Add Discriminators to “Halo”, “Leakage 1”, “Leakage 2”;
  - Add “Halo” to hardware trigger as S124 Veto;
  - Add “Leakage 1+2” to hardware trigger as a S12 Veto (selection from Run Control?);
  - Use Sum1 and Sum2 in TDC “multihit” ?!
- 
- HV supply – I need 8 channels;
  - Scalers to monitor various beam rates;
  - Delay cables (80ns, 160ns, 240ns) – two of each;
  - Short Lemo cables for trigger;