

A slow control monitor for the KLM trigger

Giacomo De Pietro

Università di Roma Tre



INFN Roma Tre



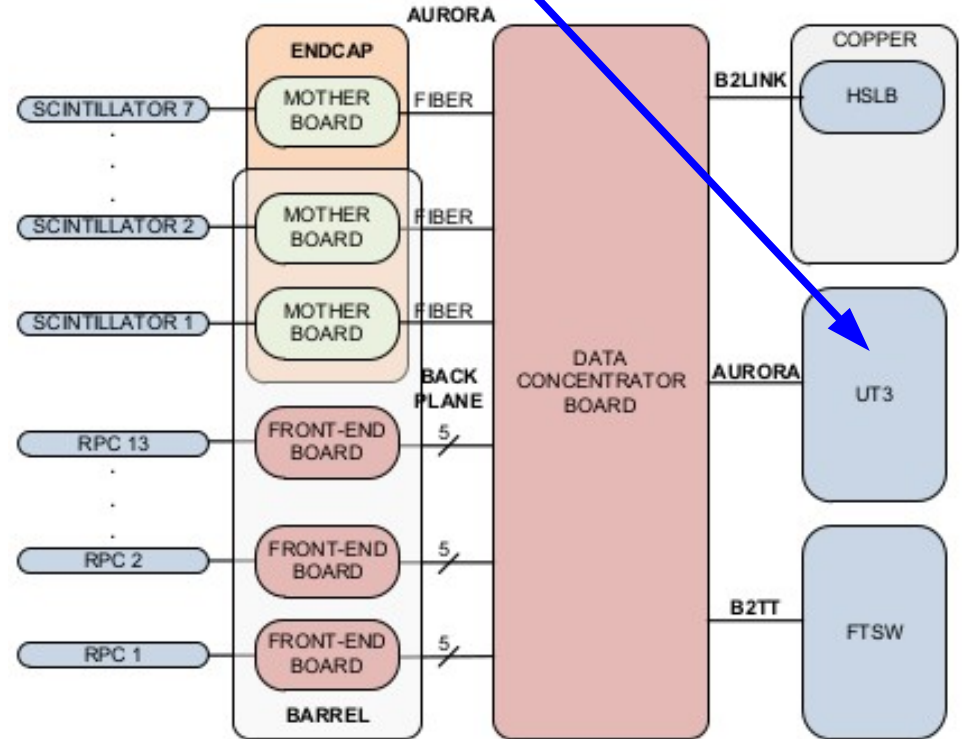
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I wrote a (very) simple SLC monitoring system for the **KLM trigger**.

I'm using the NSM2 protocol.

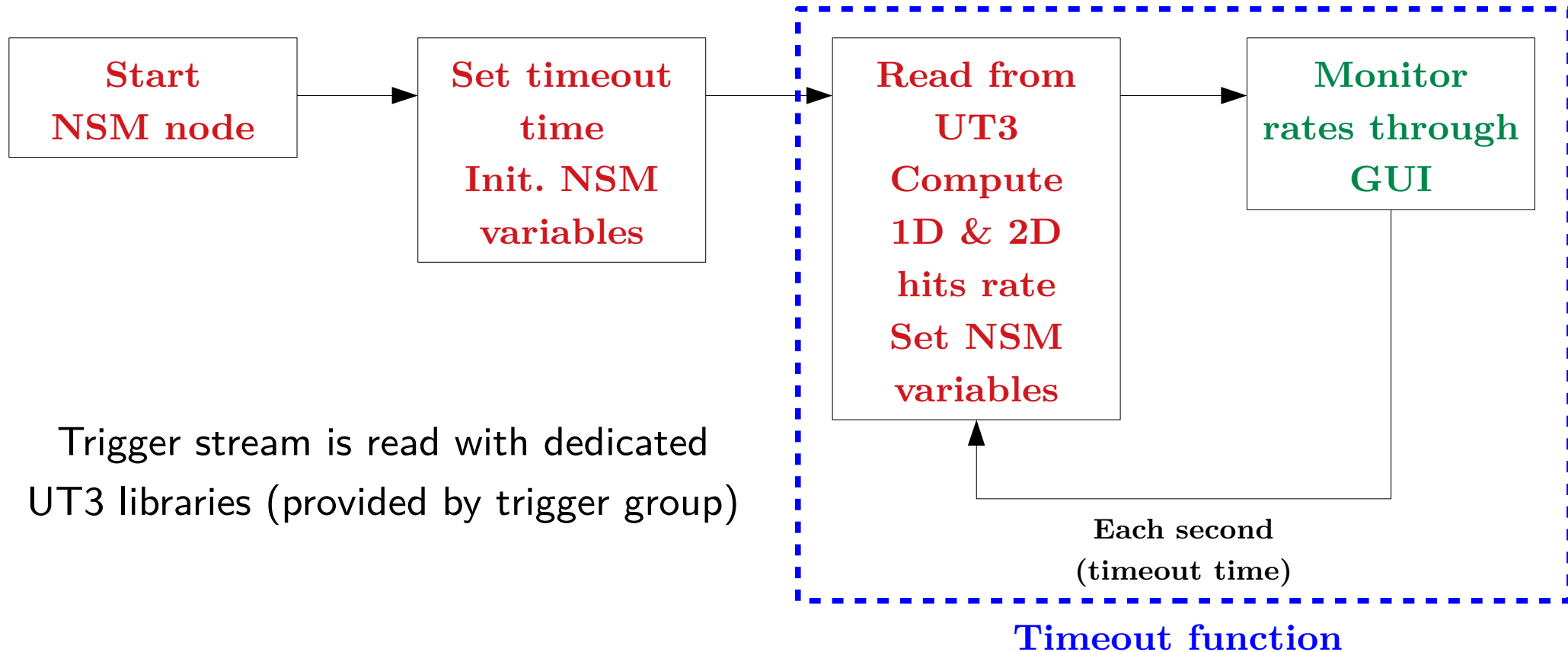
The core code is written in C++,
the GUI is made with CSS-studio.

The trigger stream can be read from
the vmeusa machine (access via btrgctr0
in the bdaq network).



KLM trigger firmware developed by D. Liventsev

The NSM daemon is running on **vmeusa** machine; the GUI runs on **btrgctr0**.



Trigger stream is read with dedicated UT3 libraries (provided by trigger group)

BKLM Trigger Monitor

DEBUG: 246557

TRIGGER SETTINGS	Hit Thr: 6	Trg nLayers: 7	Trg Switch: 0	Trg Delay: 0	Trg Length: 1	Trg Scale: 0			
	BF0	BF1	BF2	BF3	BF4	BF5	BF6	BF7	
Hits1D	0.000	0.000	0.000	0.000	21.919	0.000	0.000	0.000	MHz
Hits2D	0.000	0.000	0.000	0.000	3.587	0.000	0.000	0.000	MHz
	BB0	BB1	BB2	BB3	BB4	BB5	BB6	BB7	
Hits1D	21.225	0.000	0.000	22.936	0.000	0.000	0.000	0.000	MHz
Hits2D	0.664	0.000	0.000	1.283	0.000	0.000	0.000	0.000	MHz
Common Trg	0.0								
Ext Trg	0.0								

This is the GUI,
opened on KLMPC02
(PC for KLM shifters)

I will include soon the rates
of each layer of a
chosen/monitored sector

IF THE NSM DAEMON STOPS RUNNING OR YOU NEED TO RESTART IT:
from the terminal `b2klmtrg@usa` type `"testd test"` and press ENTER

The only persons that can start the NSM daemon if the terminal is closed are:
Giacomo De Pietro (`giacomo.depietro@roma3.infn.it`)
Dmitri Liventsev (`dmitri.liventsev@kek.jp`)

List of trigger registers:

<https://confluence.desy.de/display/BI/KLM>
+trigger+registers

- I'm working to include the NSM variables of KLM trigger in the EPICS archiver (I've several troubles... very poor documentation about NSM system!)
- Currently I'm monitoring only the BKLM detector, but the code can easily handle also the EKLM trigger stream (I just need to "duplicate" the daemon and change the registers' addresses; an additional GUI will be provided)
- Finally, I will need to clean a bit the code for an easy maintenance :)