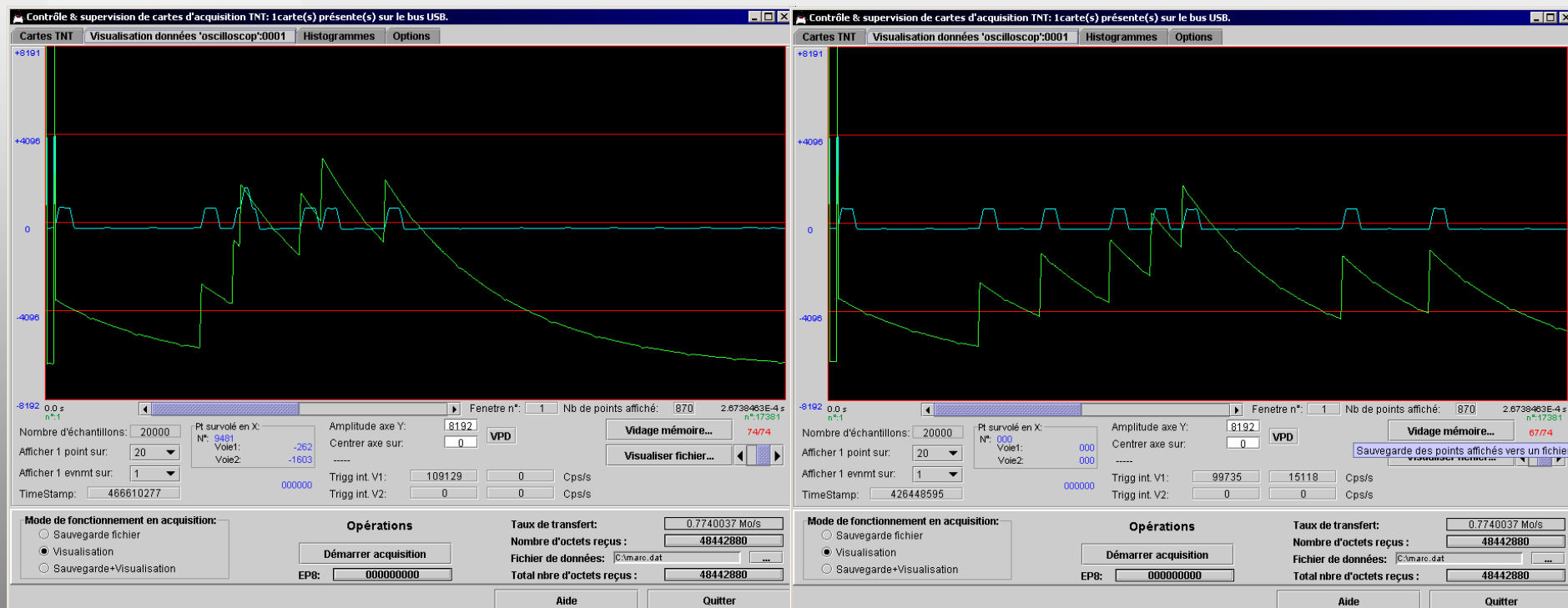


MWD on TNT

P.Médina

MWD on TNT



10/02/2004

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2

MWD on TNT Analog inspections lines.

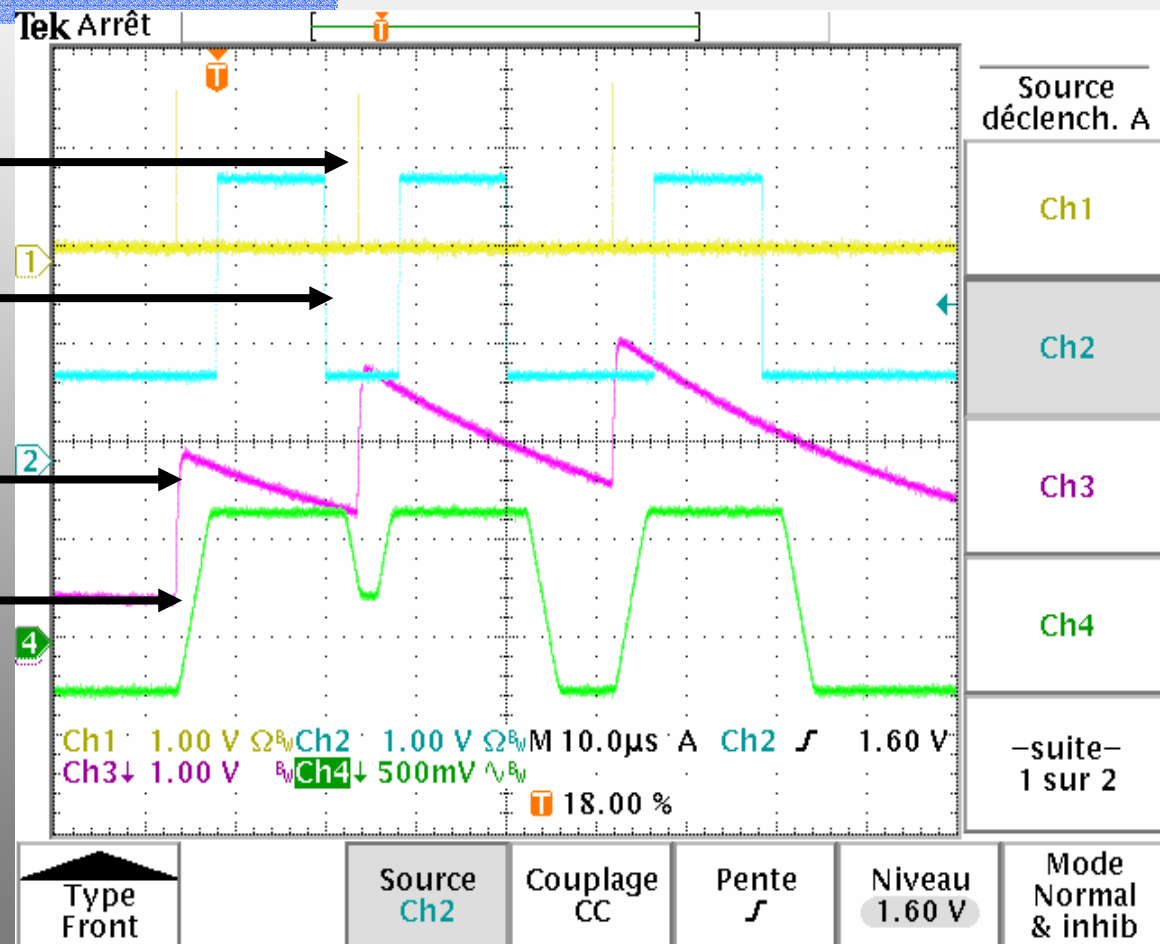
Local Trigger

Average calcul

Input Signal

MWD signal

**Average on 80 %
of the flat top**

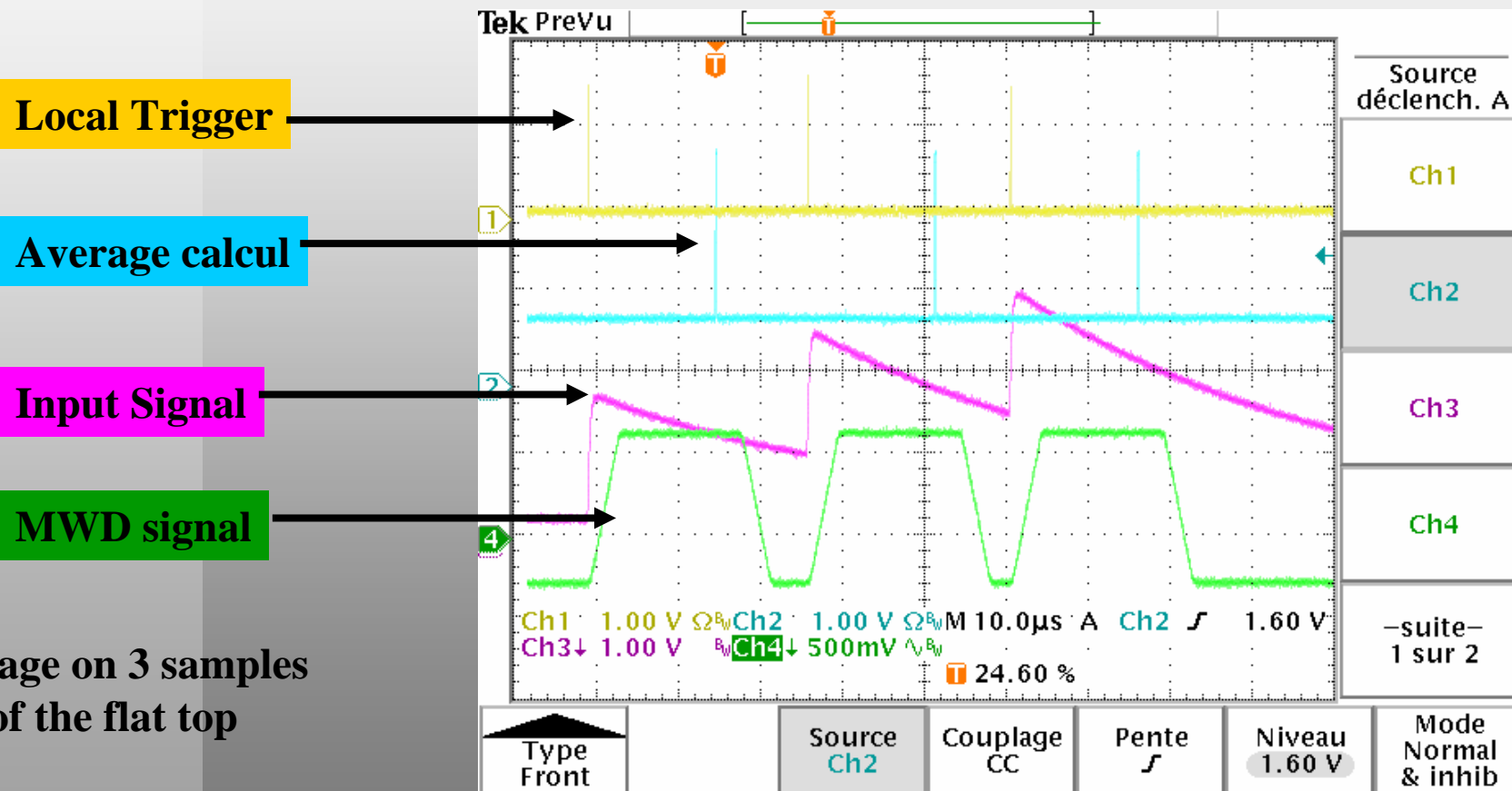


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3

MWD on TNT Analog inspections lines.



Average on 3 samples
of the flat top

Tests with planar

FWHM : 1.33 Mev 1.78 us / shaping time 2 us
120 kev 0.91 us / shaping time 2 us

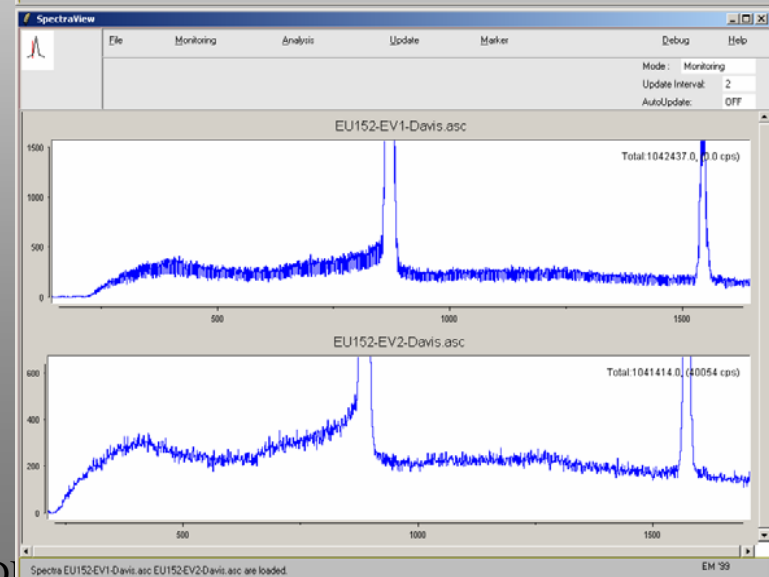
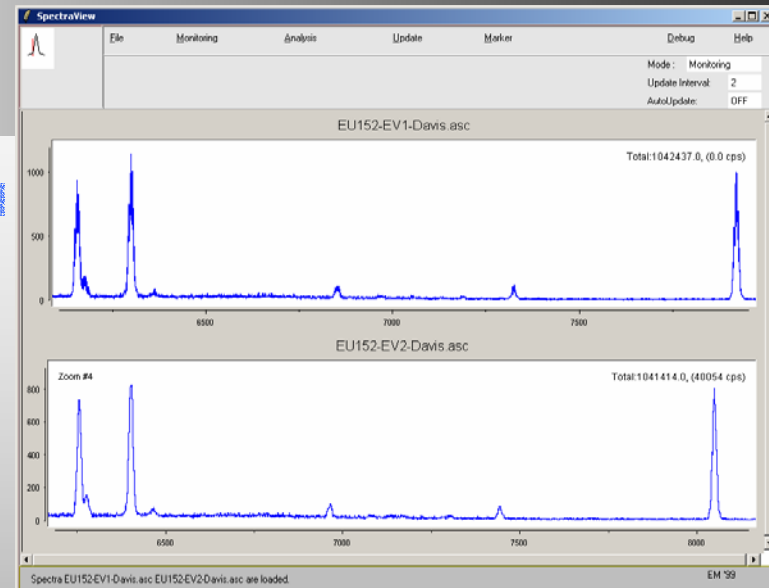
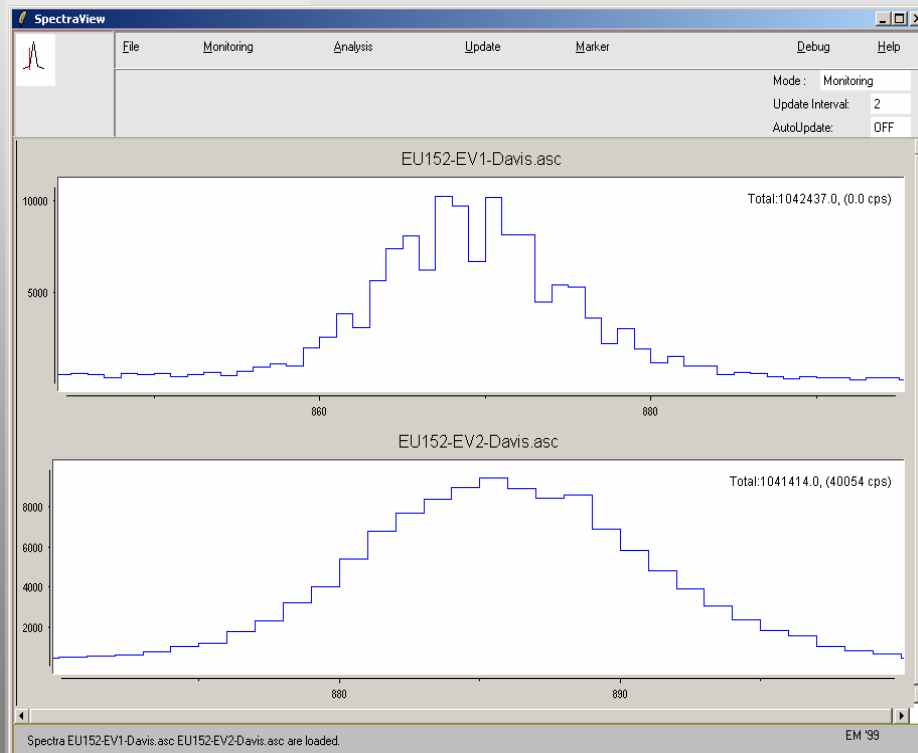
Table 1:
Counting rate: 2k cps
Trapezoid top: 1 μ s

Rise time [μ s]	FWHM [keV] at 1332.5 keV (^{60}Co)
1.0	2.0
2.0	2.0
5.0	2.0
10.0	2.0
15.0	2.0

Table 2:
Counting rate: 11k5 cps

Rise time [μ s]	Top [μ s]	FWHM [keV] at 1332.5 keV	FWHM [keV] at 121.8 keV
2.0	1.0	2.10	1.20
9.5	2.0	2.23	1.35

D.N.L



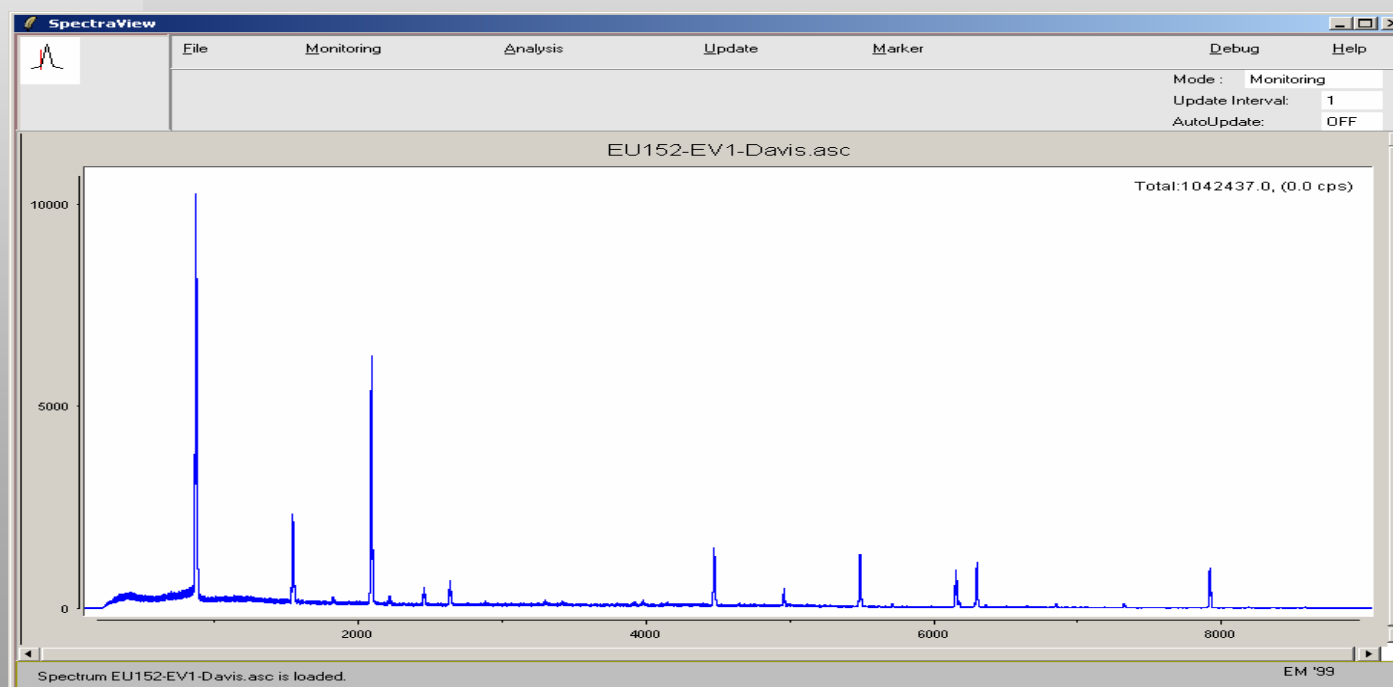
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Integral Nonlinearity (INL)

Ganil INL : 0,04 % with Resistances

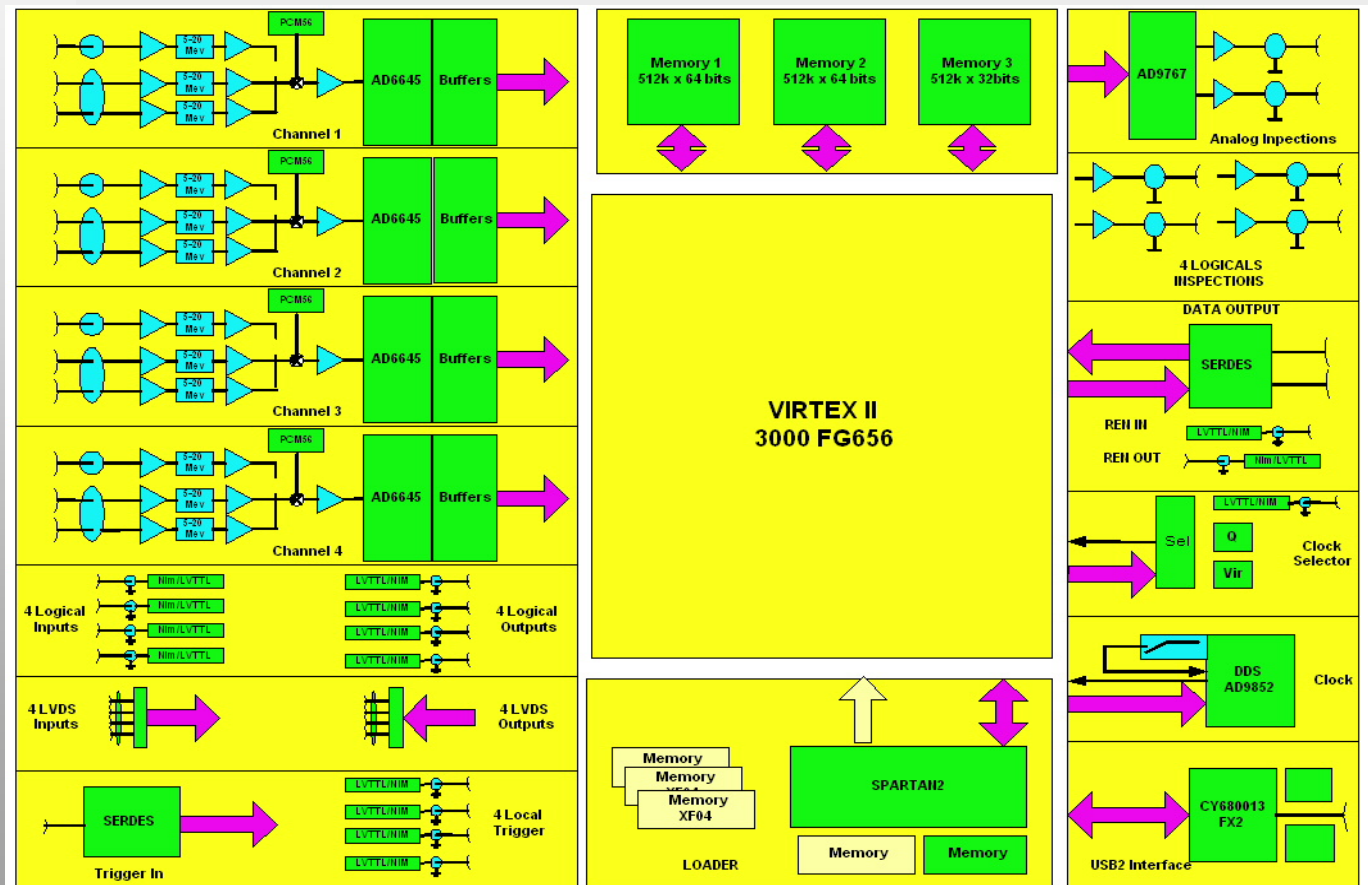
IReS INL : 0,02 % with EU152



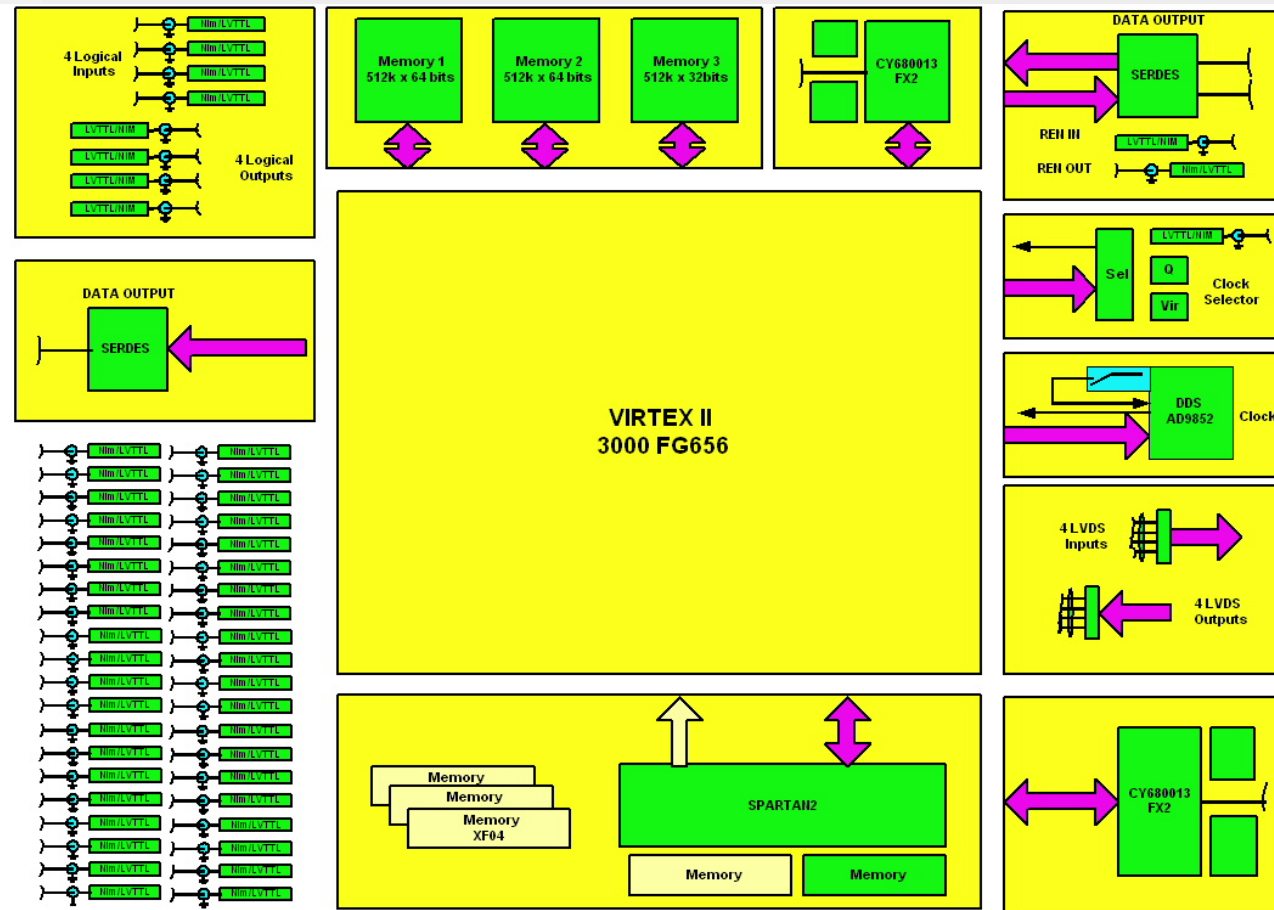
TNT2 4 Channels

- **4 x channels 80 MHz 14 bits 512KSamples**
- **1 Virtex2 3M Gates**
- **1 loader USB2**
- **1 output USB2**
- **1 input clock / 1 input clock
TimeStample&Trigger**
- **1 output 2.5 Gbits/s**

TNT 2 schema block



TNT 2 Clock / Trigger

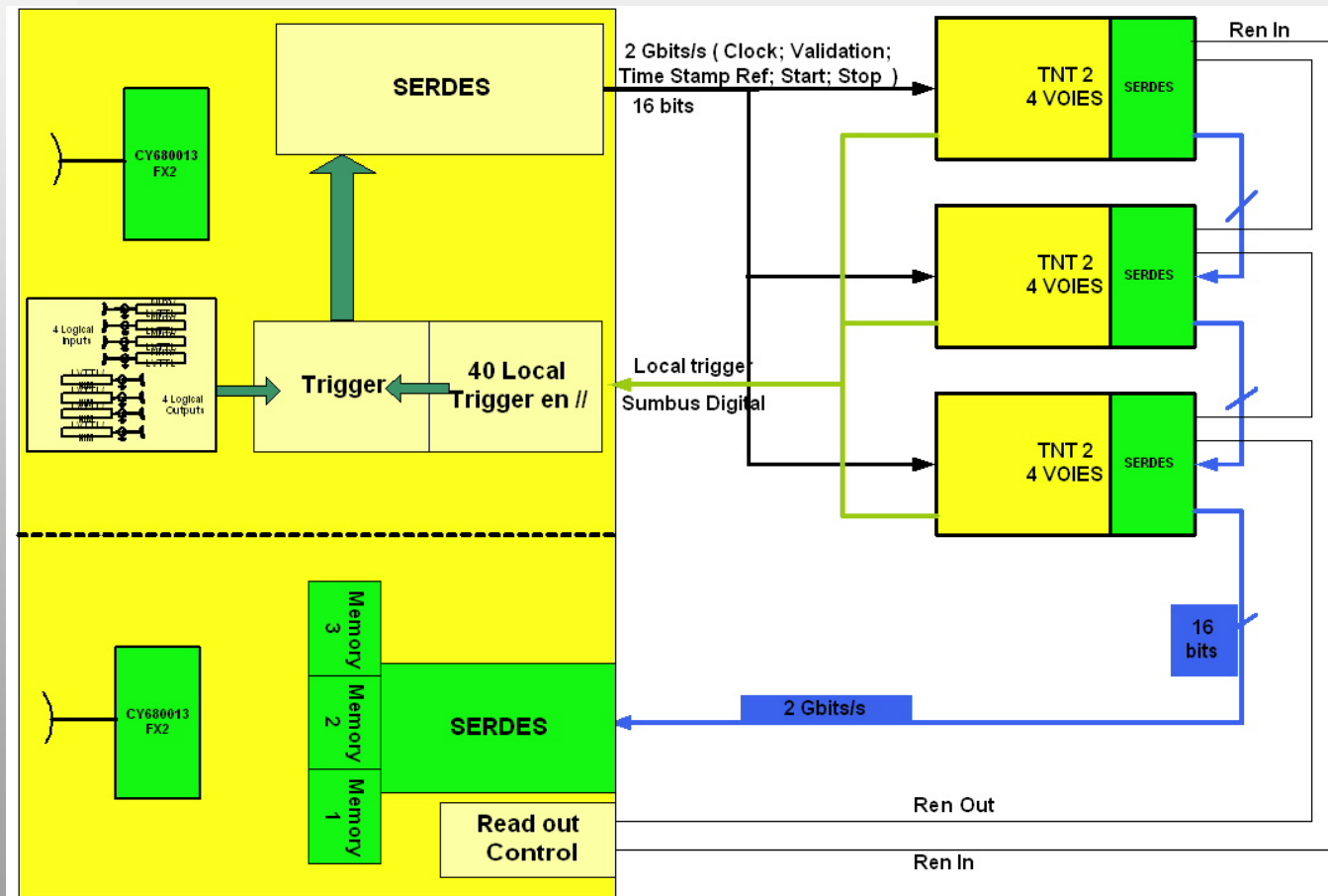


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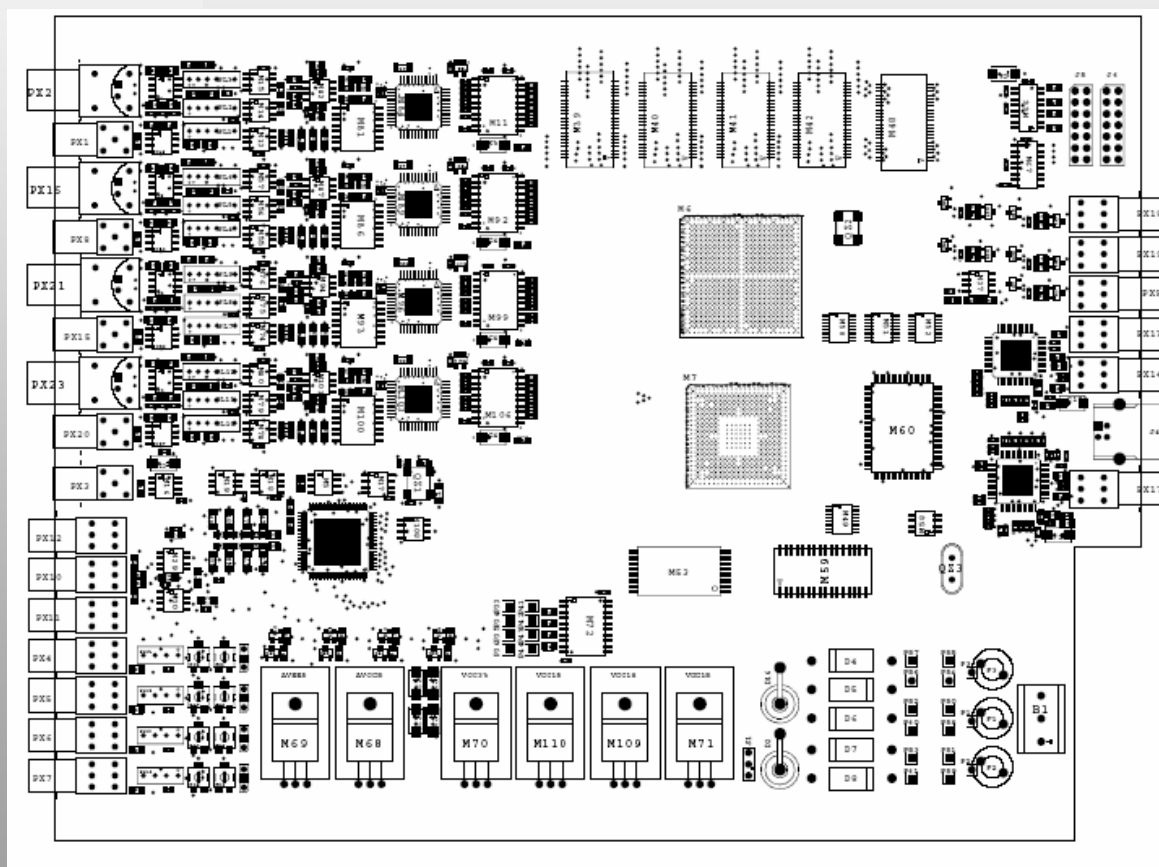
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10

TNT 2 Connections



TNT2 PCB



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12