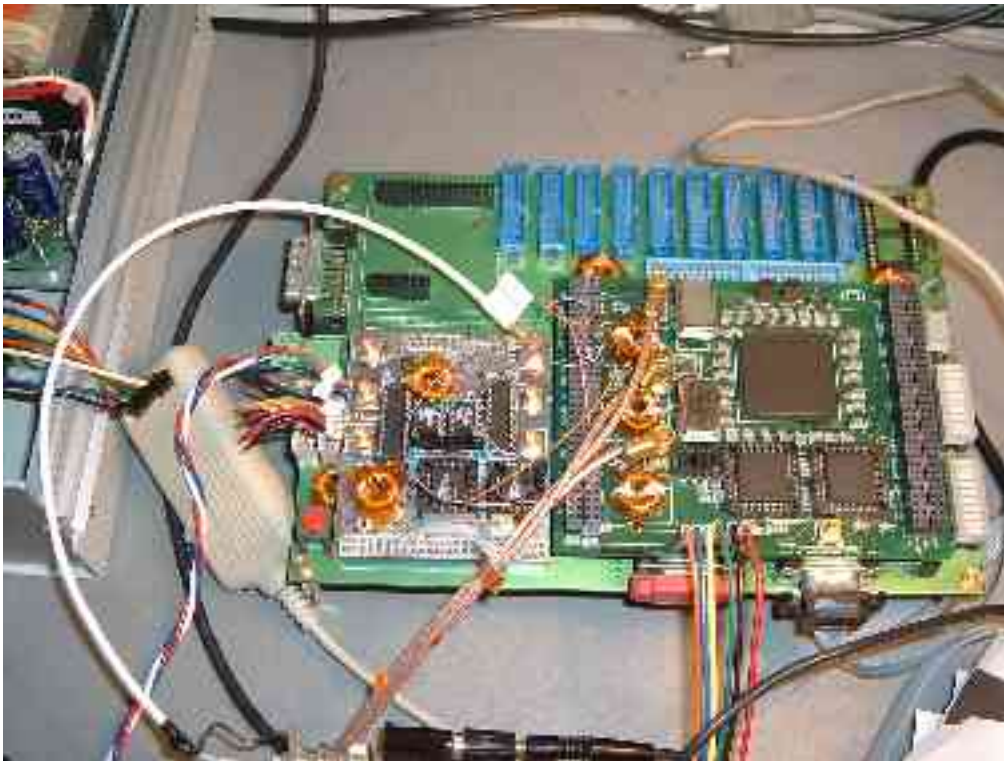
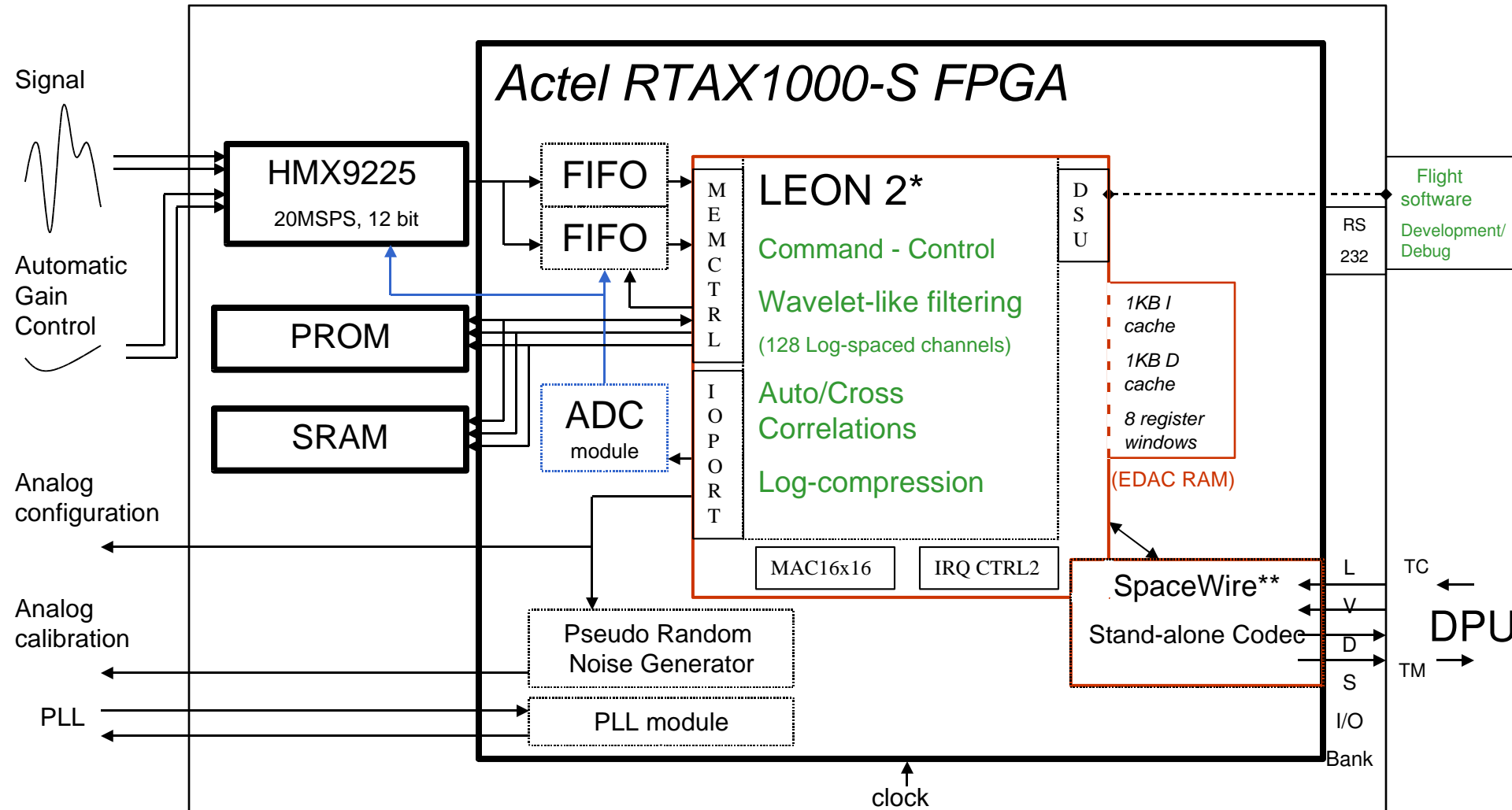


ESA IPs in Actel RTAX-S FPGA: DSP application(s) in plasma physics



Thermal Noise Receiver DSP board – CNES R&T funding (2004-2006)

Multichannel Frequency Analyzer Architecture



* leon2-1.0.28-xst model (no FPU, no PCI, no Ethernet)

** SpaceWire-b (ECSS-E-50-12 A)

Feedback/Questions

- LEON2/LEON3:
 - FPGA implementation preferred to AT697E
 - Detailed documentation, tests benches, active discussion list
 - Working environment (tkconfig, BCC, Eclipse/CDT, GRMON, DDD)
 - Hazard (XST incremental, Libero/Synplify)
- SpaceWire-b:
 - Detailed Documentation, tests benches, community list (EGSE)
 - IP licensing form signed, source code to be received soon
 - How about SpW-AMBA plugged to LEON-AHB ?
 - Technical support ?
- Related questions:
 - Contact at ESTEC ?
 - CNES tested Virtex only
 - LEON in Axcellerator in progress by CNES subcontractor
 - Quality assurance, VHDL coding style
 - Next R&T: towards multi-processor, HF processing and neural networks