

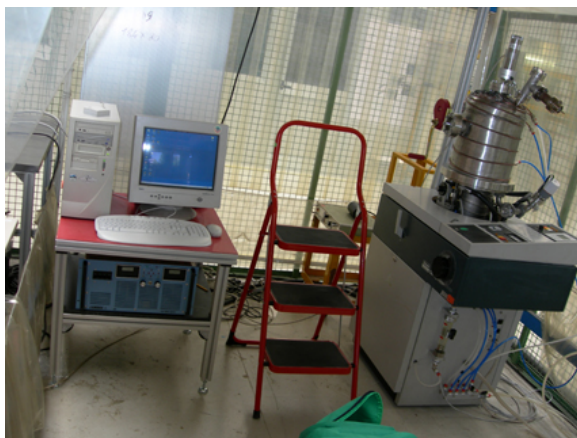
# Direct Target Carburization Control System

## Status Report

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# Set-up



M.Giacchini

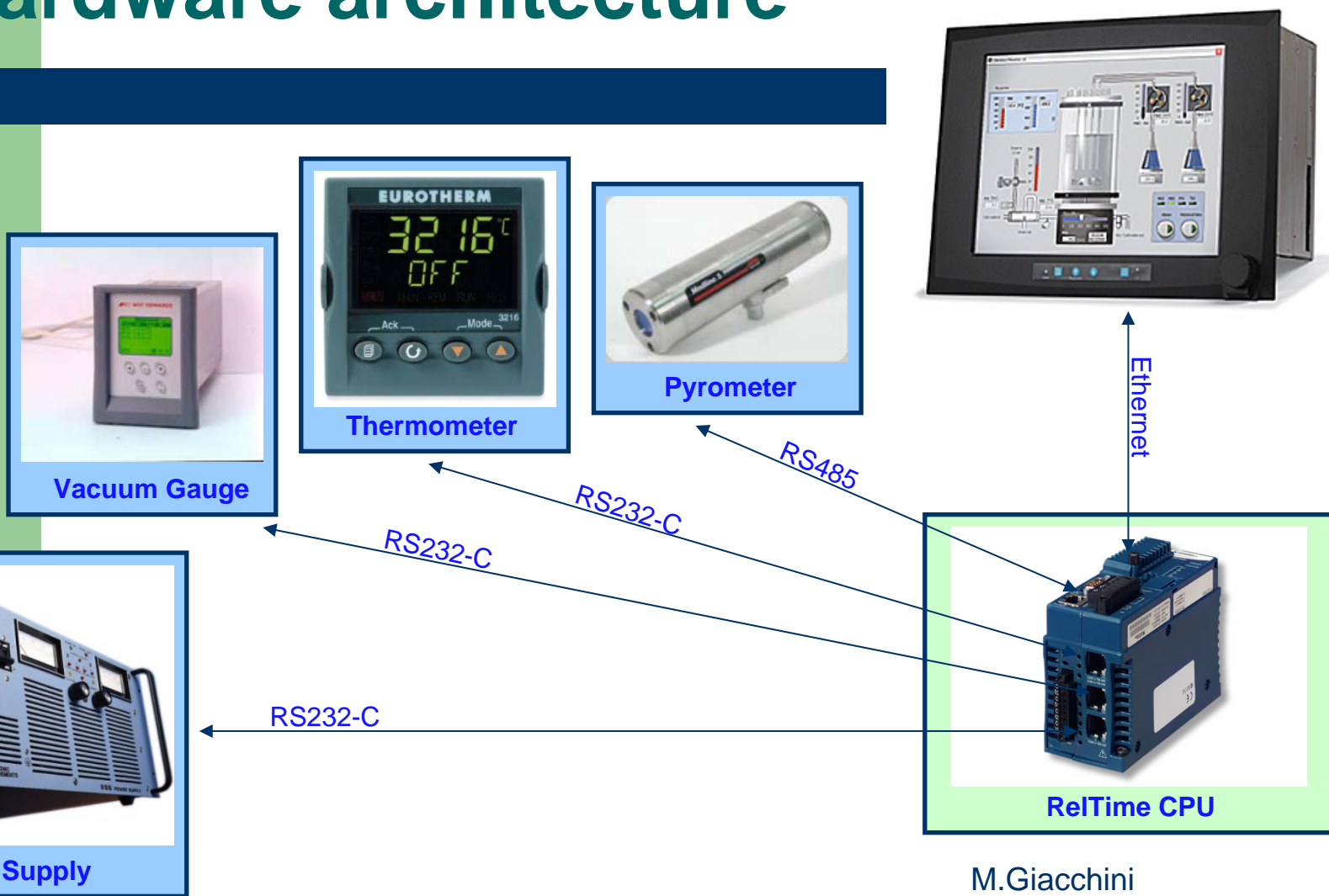
# Software Requirements Specifications

- This document is in IEEE STD 830 format
- Last revision (1.4) has done during the meeting held at LNL 5/6/2006
- The software development will follow this document, to give a copy send me an email

# Order to payment done

- cFP RealTime CPU Module
- 4 Analog Input / 4 Analog Output module
- 16 Digital I/O module
- 15in Panel PC with touch screen

# Hardware architecture



# Works in progress

- A regular PC with 4 ports RS232C (PCI board) is used, waiting for the material ordered
- The necessary software was installed and configured
- Cable and software driver to Power Supply and Vacuum Meter has been realized and is under test



Vacuum Gauge



Power Supply



PC

RS232-C

RS232-C

# A demo program is ready !

- Follow the requirements, the program takes data from an Excel file with Sec, Volts and Amp on columns
- The minimum time allowed between the steps is 60 seconds
- During the carburization process the power, voltage, current and the vacuum are displayed
- At the end a Graphical Power Vs Vacuum is showed



# Demo program: Front Panel

