

Scheda Laboratori di Ricerca

Denominazione del Laboratorio	<p><i>Italiano</i> Laboratorio di Elettronica <i>Inglese</i> Laboratory of Electronics</p>
Gruppo di Ricerca di Riferimento	<p><i>Italiano</i></p> <ol style="list-style-type: none"> 1) Elettronica di Potenza per l'Industria, l'Energia ed i Trasporti 2) Applicazioni avanzate, modellazione e progettazione di dispositivi elettromagnetici in bassa frequenza 3) Elaborazione delle immagini e sensoristica ottica e a microonde <p><i>Inglese</i></p> <ol style="list-style-type: none"> 1) Power Electronics for Industry, Energy and Transport 2) Advanced Applications, Modeling and Design of Low Frequency Electromagnetic Devices 3) Image Processing and Optical Microwave Sensors
Descrizione sintetica delle attrezzature, della strumentazione e delle attività di ricerca	<p><i>Inglese</i></p> <p>The main research and teaching activities carried out in the electronics laboratory are the following:</p> <ul style="list-style-type: none"> - Analysis of analog, digital, radio-frequency, energy-management circuits and systems as well as of circuits based on microcontroller (uC) and FPGA - Design of analog, digital, radio-frequency, energy-management circuits and systems as well as of circuits based on microcontroller (uC) and FPGA - Prototyping of analog, digital, radio-frequency, energy-management circuits and systems as well as of circuits based on microcontroller (uC) and FPGA - Testing of analog, digital, radio-frequency, energy-management circuits and systems as well as of circuits based on microcontroller (uC) and FPGA - Simulation of analog, digital, radio-frequency, energy-management circuits and systems as well as of circuits based on microcontroller (uC) and FPGA. <p>The main equipment available in the electronics laboratory is the following:</p> <ul style="list-style-type: none"> - Keysight Technologies ENA E5061B Vector Network/Impedance Analyzer, 5Hz – 3GHz - Agilent 4396B RF Network/Spectrum/Impedance Analyzer, 2Hz – 1.8GHz - Agilent ESA E4404B Spectrum Analyzer, 9kHz-6.7GHz - Agilent 1682A Standalone Logic Analyzer, 800 MHz / 400 MHz - Teledyne LeCroy HDO6104B Oscilloscope, 1GHz, 10GS/s - Lecroy Waverunner 6100A Oscilloscope, 1GHz, 10GS/s - Teledyne LeCroy HDO6054 Oscilloscope, 500MHz, 2.5GS/s - Tektronix TDS5054B Oscilloscope, 500MHz, 5GS/s - Agilent 8648B Radio Frequency Signal Generator, 9kHz – 2GHz - Keysight Technologies 33622A Waveform Generator, 120 MHz - Rohde&Schwarz AM300 Arbitrary Function Generator, 50MHz - Kepco BOP 50-2D 4-quadrant Amplifier, 50V, 2A - Keysight Technologies EL34243A Electronic Load, 300 W, 60 A, 150 V - Keysight Technologies U1733C LCR Meter, 20mF, 200 MΩ, 2000H - Keysight Technologies E36313A Triple Output Power Supply, 160W - Keithley DMM6500 6.5 Digit Multimeter.

- Electronic measurement instruments
- Circuit prototyping tools
- Tin soldering iron
- Personal Computers