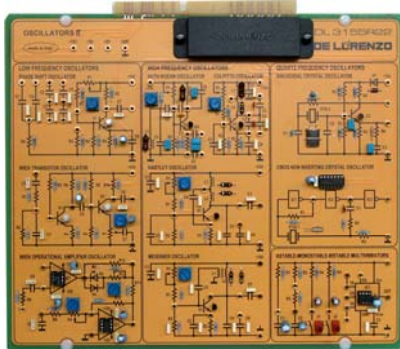


# TIME ELECTRONIC BOARDS

## OSCILLATORS



DL 3155R22

### Theoretical topics:

- Characteristics of RC-phase shift oscillator
- Characteristics of Wien bridge oscillator with BJT transistor
- Characteristics of Wien bridge oscillator with Operational amplifier
- Characteristics of Huth-Kuehn oscillator
- Characteristics of Colpitts oscillator
- Characteristics of Hartley oscillator
- Characteristics of Meissner oscillator
- Characteristics of Crystal oscillator
- Characteristics of non-inverting crystal oscillator
- Characteristics of astable, monostable and bistable multivibrators with IC 555 Fault simulation

### Circuit blocks:

- Low frequency oscillators:  
Phase shift oscillator  
Wien transistor oscillator  
Wien OA oscillator
- High frequency oscillators:  
Huth-Kuehn oscillator  
Colpitts oscillator  
Hartley oscillator  
Meissner oscillator
- Quartz frequency oscillators:  
Sinusoidal crystal oscillator  
CMOS non inverting crystal oscillator
- Astable – Monostable – Bistable multivibrators

## DSP – DIGITAL SIGNAL PROCESSOR



DL 3155E26

### Theoretical topics:

- Introduction to the circuit board
- The Assembler and Debugger
- Numerical formats
- The Central Arithmetic in DSP
- Memory structure
- Address generation unit
- The Program Controller
- The Pipeline
- DSP Peripherals
- Digital Signal Processing FIR filter
- Fault simulation

### Circuit blocks:

- Audio amplifier
- CODEC
- I/O interface
- DSP
- Interrupts
- Auxiliary I/O
- Keyboard
- LCD display