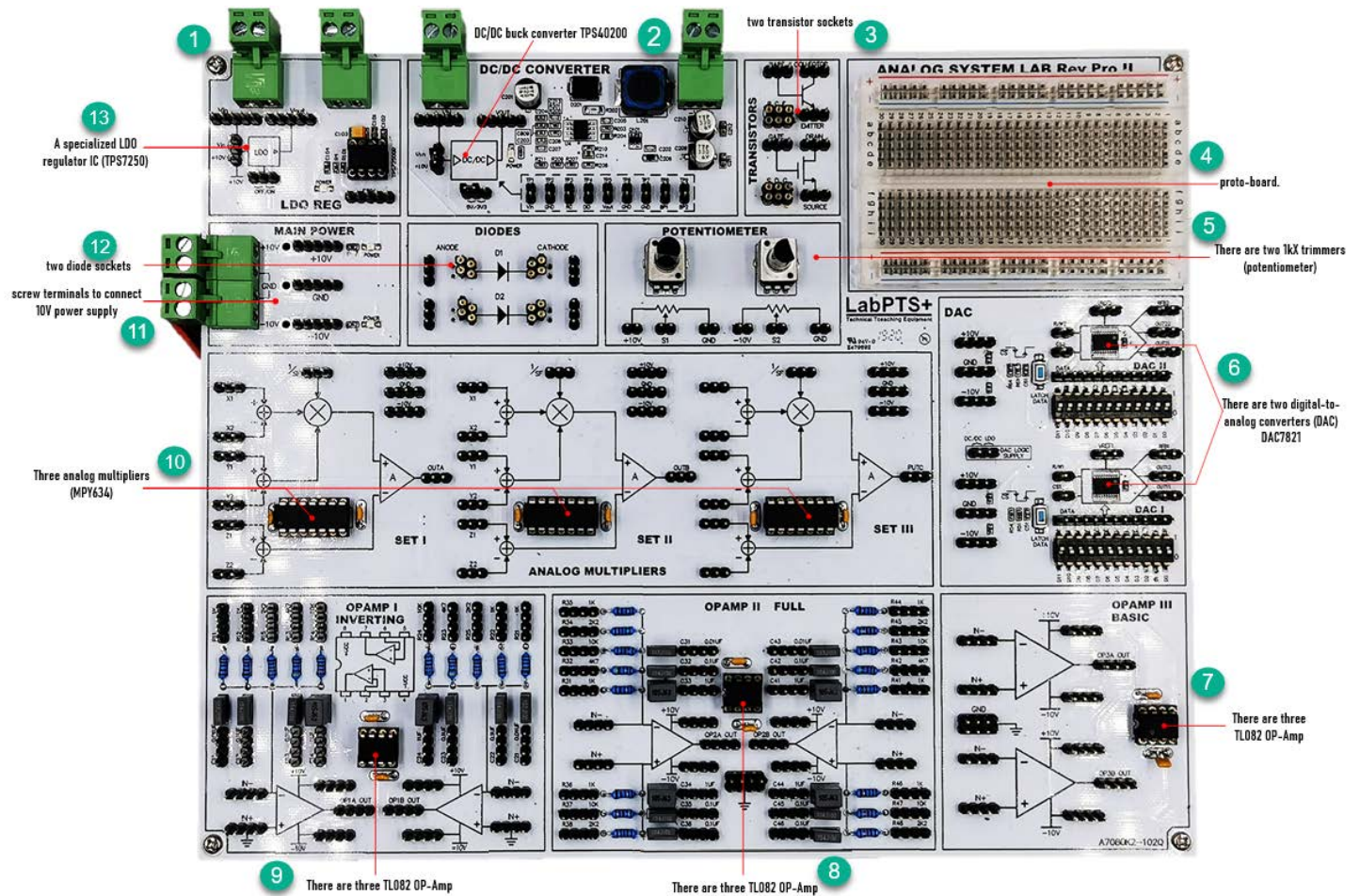


# BASIC ANALOG ELECTRONICS CIRCUITS LAB KITS

FOR EDUCATION IN ELECTRONICS AND ELECTRICAL FIELDS



## FEATURE DETAIL

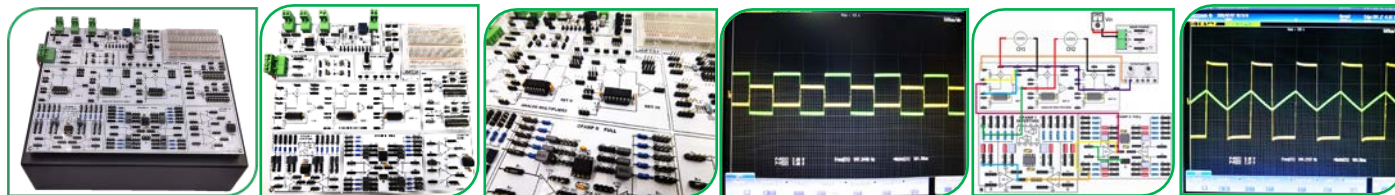
- The student should have the following skills to pursue Analog System Lab: Basic understanding of electronic circuits, Basic computer skills required to run the simulation tools, Ability to use the oscilloscope, Concepts of gain, bandwidth, transfer function, filters, regulators and wave shaping
- Study the characteristics of negative feedback amplifiers and design of an instrumentation amplifier
- Study the characteristics of regenerative feedback system with extension to design an astable and monostable multivibrator
- Study the characteristics of integrators and differentiator circuits
- Design of Analog Filters
- Study the parameters of an LDO integrated circuit
- Study the parameters of a DC-DC Converter using on-board Evaluation module

## ACCESSORIES LAB KITS

- BASIC ANALOG ELECTRONICS CIRCUITS LAB Kits
- AC Power Cable.
- Jack Cable
- Worksheet Document.

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## SYSTEM CONFIGURATIONS

Module Interface	Description	Channel
1. Plug in Power Supply	220V 50 Hz	1
2. DC/DC buck Converter	TPS40200	1
3. Transistor sockets	2N3904, BS250	2
4. Proto-board.	The top right portion of the kit is a general-purpose area which can be used as a proto-board. $\pm 10V$ points and GND are provided for this area	1
5. Potentiometer	There are two 1kX trimmers (potentiometer) in the kit to enable the designer to obtain a variable voltage if needed for a circuit. The potentiometers are labeled P1 and P2. These operate respectively in the range 0V to +10V, and -10V to 0V.	2
6. Digital-to-Analog Converters (DAC)	DAC7821	2
7. OP-Amp Type III BASIC	TL082	2
8. OP-Amp Type II FULL	TL082	2
9. OP-Amp Type I INVERTING	TL082	2
10. Analog multipliers	MPY634	1
11. Main Power	The kit has a screw terminal to connect $\pm 10V$ power supply	1
12 Diode	1N4448	2
13. LDO regulator	TPS7250	1